

SILICON GULCH GAZETTE

31

January 1983

Initiative, Inc., 345 Swett Road, Woodside CA 94062

(415) 851-7077

Intelligent Robot for Home Experimenters

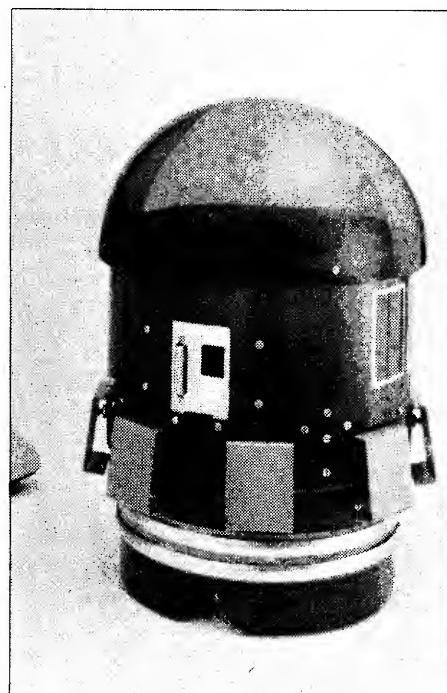
The RB5X Intelligent Robot, a manufactured unit designed for home experimenters, is now available.

Manufactured by RB Robot Corporation of Golden, Colorado, the RB5X learns from its experience. With its own microprocessor, memory, programs, and tactile sensors, the robot detects and responds to objects in its path. Once a successful random response is achieved, the RB5X remembers its actions and repeats the correct response when confronted again with the same situation. These same principles are intended to be applied with other sensors and with more complex programs by the home experimenter using the RB5X as a starter system.

Designed for technically-oriented consumers (engineers, scientists, computer programmers, educators, hobbyists, etc.), RB5X features allow experimentation in robotics. Users may increase the "experience" and capability of the robot by installing additional mechanical functions and additional sensors, such as Polaroid's Rangefinder sonar sensor.

The robot's standard RS-232 interface makes it compatible with the Apple, TRS-80, IBM PC, and other popular microcomputers to allow for program entry and data transfer. For example, its memory can be transferred to a personal computer to enable the user to study memory patterns generated and alter RB programs accordingly.

One circuit in the RB5X enables it to recharge its batteries automatically. The robot senses when its batteries are low, seeks out its battery



charger, fully charges over a period of time, and detaches itself from the charger to resume its adventures.

The basic RB5X unit sells for \$1195. A special option package with additional memory, the Polaroid Rangefinder sonar sensor, and a pulsating light option is also available for \$295.

New features under development include a mechanical arm, a voice synthesizer, and digital radio communications between RB5Xs.

For more information, contact: RB Robot Corp., 14618 W. Sixth Ave., #201, Golden, CO 80401, (303)-279-5525.

THE 8TH WEST COAST COMPUTER FAIRE

Friday, March 18 9am-6pm
Saturday, March 19 9am-6pm
Sunday, March 20 10am-5pm

San Francisco, March 18-20, 1983

Civic Auditorium & Brooks Hall

\$15 Registration
(No checks or charges)

Pre-registration available at participating stores & clubs
Registration includes Conference Program & Exhibition for all 3 days

Computer Faire • 345 Swett Road • Woodside, CA 94062 • (415) 851-7077

8th Computer Faire Offers Massive Conference Program; Capacity Trade Exhibit

The 8th West Coast Computer Faire appears certain to be the most interesting and valuable micro convention yet convened, and the largest such show open to end-users. "Byte" columnist Jerry Pournelle, a long-time micro observer and sci-fi author, unequivocally stated in "Byte": "For my money, the West Coast Computer Faire has become the most important show of the year."

Dr. Portia Isaacson, President of Future Computing and one of the best-known industry analysts in the micro world, was equally definitive in a recent comment. She stated that she regards the "West Coast Computer Faire to be one of the three or four most significant computer conventions each year, because it always offers an unusually large number of introductions of particularly innovative new products."

The 8th Faire is jammed into every nook and cranny of San Francisco's 4-story Civic Auditorium, plus all of Brooks Hall, plus all major meeting halls in the two largest hotels that are adjacent to the convention center.

Taking place March 18-20, the 8th Faire sold out of its regular exhibit space fully three months before the convention.

A month later — with the Faire still two months away — it rented its last available "microbooth". These 6'x6' microbooths are a service that is unique to the Computer Faires. They offer very low-cost exhibit space for entrepreneurs and computer craftspeople who may be very innovative, but are under-capitalized. For eight Faires, they have always been one of several major focal points for Faire attendees.

Though the Conference program is not finalized at press time, over 100 tutorial and technical papers have been submitted for consideration. Over 150 people have authored these papers, prepared talks, and/or been chosen to serve on panel sessions.

Additionally, optional in-depth half-day and full-day tutorials will be offered in conjunction with the Faire (extra fee).

Registration for the entire 8th Faire Conference and Exposition is \$15, with pre-registration discounts available to groups [see details, elsewhere in this issue]. No checks or charges will be accepted at the door.

Gossip Galore

by Jim Warren

(That title sounds like a character from an old James Bond story. Oh well, there's no accounting for the tastes of headline writers. Of course, we will offer no hint as to who the headliner mite be.)

For those who are not familiar with this questionable column: This is a collection of facts, semifacts, and eccentricities — of the micro world — presented for the entertainment, incitement and possible enlightenment of our fellow technojunkies.

PE BECOMES CE

If you haven't already noticed, "Popular Electronics" magazine has become "Computers & Electronics." In several ways, PE can be said to be the rag that created personal computing. Back in 1974, it ran articles on the design of the old "Micro-8" — a build-it-yourself non-kit based on the Intel 8008.

Then it ran the January, 1975, cover story on the MITS Altair . . . and the micro industry was off and running.

Its long-time Editor is Les Soloman, an inveterate, first-rate electronics hobbyist (after whom, some say, Processor Technology named its Sol computer). Les has had a long, long interest in computing, and it looks like the publishing conglomerate Ziff-Davis (C&E's owner) has acknowledged the importance of

computing in "popular electronics," and will now allow Les to publish bit banging to his heart's content.

"PC MAGAZINE" STAFF BECOMES "PC WORLD" STAFF

While we are mentioning Ziff-Davis, we might point out that Z-D has recently purchased "PC Magazine" from Tony Gold, the banker behind New York City's Lifeboat Associates.

There is considerable acrimony over this purchase. Virtually every key staff member from the original "PC Mag" left in a fury (that they say was more than justified), claiming broken promises and dishonored written and verbal agreements. This en masse staff defection apparently includes all of the excellent array of special-topics editors who used to work for "PC Magazine."

Given the phenomenal success that they had made of the original "PC Magazine," this team — headed up by David Bunnell — was able to quickly hook up with publisher Pat McGovern, reportedly the largest computer publisher in the world. Among other things, he founded and owns "ComputerWorld," "ISO World," (a computer trade rag for independent service organizations and dealers), and owns "InfoWorld" (continued on page 2)

Clarkson College Will Issue Computers To Student Body

Clarkson College, Potsdam, New York, will provide desktop computers to all incoming freshmen, beginning this Fall.

Clarkson College has selected Zenith Data Systems Corporation's Z100 desktop computers and the subsidiary of Zenith Radio Corporation will be supplying more than 1,000 computers each year for the next four years. The retail value is estimated to be in excess of \$3.7 million annually.

"This is something colleges and universities have been talking about for years," said David Bray, dean of Clarkson's Educational Computing Systems. "If all goes as planned, in the course of time every stu-

dent at Clarkson will have their own microcomputer and be linked to a campus-wide network.

"We considered everything from Apple to Zenith in our search and in terms of price, quality, capabilities, and expandability Zenith's Z100 had it all," he said. "Especially important was the ability of the system to interface with the school's mainframe computer, an IBM 4341," said Bray.

Clarkson selected the Z100 low-profile model with a single diskette drive and monochrome graphics. A Zenith high-resolution, 12 inch green monochrome display with a 25 line by 80 character display is also being supplied.

Software being provided includes the CP/M 85 and ZDOS operating system software to run the computer, as well as Z-Basic software for graphics, Fortran and Cobol languages for writing programs, and Multiplan—an electronic worksheet for quick calculations and forecasts.

The Zenith Z100 individually controls 640 dots on 225 lines, a total of 144,000 dots. Creation of three dimensional images of objects, charts and graphs is possible and the unit can be upgraded for color graphics.

The Zenith computer has two microprocessors to run 8-bit software, is widely available on the market, and has 16-bit software. It uses an industry standard expansion struc-

ture called the S100 bus with four open slots to permit other computer equipment to operate with the Zenith computer.

Suggested retail price for each unit is less than \$3400. The cost of the computer is being subsidized by restricted grants and students will pay \$200 each semester plus an initial one-time maintenance fee of \$200. At graduation the students will own their computers.

Clarkson is an independent coeducational college with undergraduate programs in engineering, management, and science. The school was founded in 1896 and currently has about 4,000 students enrolled.

InfoWorld Product of Year Awards at Faire

This year, the West Coast Computer Faire will again be the site for presentation of "InfoWorld's" prestigious hardware and software Product of the Year awards.

"InfoWorld," The Newsweekly for Microcomputer Users, which is going into its fourth year of publication, has chosen the renowned annual West Coast Computer Faire as the event at which to make its yearly awards.

Nineteen eighty-two's winner of "InfoWorld's" Hardware Product of the Year is the IBM Personal Computer. The Software Product of the Year winner is Multiplan from Microsoft.

Gossip... (continued from page 1)

(founded by this column's author, several years ago and later sold to Pat).

Pat even owns the first computer periodical to serve mainland China. He also has a batch of radio and television stations, and is deeply involved in information distribution, focusing on computer information.

With Bunnell as Publisher, McGovern has created the newest magazine to focus on the massive IBM PC market – not surprisingly, naming it "PC World." Having been involved in the computer publishing racket since micros came into existence, we are reasonably aware of McGovern's ample capabilities. We have every reason to believe that his new "PC World" – with its excellent, experienced staff – will be a very strong contender in the race to provide information about the IBM PC and its multitude of compatibles and programs.

BUNNELL KNOWS WHAT HE'S DOING

"PC World's" Dave Bunnell has been in the publication end of personal computing ever since personal computing existed. He was a tech writer for MITS when MITS President Ed Roberts announced that MITS was going to create a computer in a kit. Dave later became a Vice President of MITS.

He was the first Publisher of "Personal Computing" magazine, back when it was created by Benwill Publications.

He later had the good sense to move to the San Francisco Bay area (a little provincial myopia, there), which was – and probably still is – the undisputed center of the microcomputing industry. Here, he authored several micro publications on a freelance basis.

When Tony Gold got the idea to do a publication oriented to the IBM PC, Eddie Currie (Dr. Edward Currie, if you please) who is now Prexy of Lifeboat and used to work with Bunnell at MITS, suggested Dave as

the proposed pub's Publisher. Dave took the job, and – in less than a year – built "PC Magazine" into a huge periodical, comparable to Byte's monthly monster encyclopedia.

ZIFF TIFF OVER PC PUBS

Sadly, it is apparent that Bunnell and the original "PC Magazine" staff were more interested in publishing a great rag, than they were interested in legally delineating their relationship with investor Gold. While Bunnell and the key staff thought they were earning "sweat equity," Gold – and Ziff-Davis – apparently thought the magazine entirely belonged to Gold, and Bunnell, et al, were merely employees.

Gold and the pub's staff disagreed over the way the publication should operate. Acrimony ensued. Gold closed a deal with Ziff-Davis, selling the magazine to Z-D (reportedly for well over \$1 million, plus residuals). And, every key staff member and subject editor walked.

McGovern and this newly un-

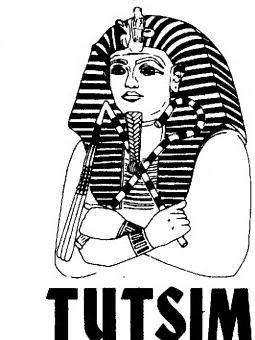
(continued on page 6)

Every designer sometimes wishes to test and refine his system before committing it to fabrication...

SIMULATION WITH TUTSIM MAKES IT POSSIBLE!

Developed at Twente University of Technology, the Netherlands. Proven in ten years of use in research. Now available for your microcomputer.

Applications include electro-mechanical systems, thermodynamic processes, electronics, batch chemical processes, physiological and biological systems, econometrics, etc.



TUTSIM

TUTSIM allows easy model entry for any system you can describe in equations, block diagrams, or bondgraph form.

TUTSIM features graphical output and friendly user interaction.

APPLE II version.....\$375. Also: Demo Disks available, \$10.00 prepaid
CP/M version.....\$400. And: List of Application notes, Send SAE
IBM PC version.....\$475.

Dealer inquiries welcome.

Order or write for information:

APPLIED i, 200 California Avenue, Palo Alto, California 94306
[415] 325-4800

TUTSIM is a registered trademark of APPLIED i.

CP/M is a registered trademark of Digital Research Corp.

APPLE & APPLE II are registered trademarks of Apple Computer, Inc.

The Silicon Gulch Gazette
a publication of Initiative, Inc.

105,000 circulation

Number 31

January, 1983

Publisher: Jim Warren

Editorial: Lindsay Yarnall McGrath

Production: Jeannie Ditter
Julie Clements

Marketing: Nels Anderson
Kathy Rapp

Operations: Vondra Doherty
Alan Kuchek
Debbie Pryor
Vicki Rupe
Bruce Quinn-Briggs
Max Clark
Judy Smith
Ellen Welch
Carol Hartung
Mike McDermott

Video Group: David Carlson
Dave Ratto

Educational Computing Major Topic in Faire Conference Program

The 8th West Coast Computer Faire will feature a major Conference Session on computers and education. Speakers will discuss the impact computers have on the way teachers instruct, children learn, and the way schools are run.

In "Goodbye Gutenberg? Books or Bytes?" Elizabeth Wall will describe how books are being used with computers for more effective learning. Instead of replacing books, computers can become partners with them in the educational process, she says. Wall will review current books available to help teachers and students with computer awareness, programming, and applications.

Teaching young children important educational concepts will be discussed in "Young Children Use Computer Graphics," by Anne Piestrup of The Learning Company in Portola Valley, California, and "Using the Microcomputer for Teaching Pre-Math Concepts to Young Preschoolers," by a team of educators from Texas Tech University in Lubbock, Texas.

Educators will have a chance to teach each other when speakers deliver talks on evaluating educational software, setting up a school mini-computer system, and a new computer language for teaching and industrial training.

In "Evaluating Educational Software," computer lab coordinator, Glee Cathcart will detail features to examine when selecting educational software. Leonard Meuer and Marilyn E. Clinger will describe the implementation of a computer system that dramatically changed computer usage and administrative data processing in a California school district in "Micros to Mini."

H.L. Gray and Alan Elliot will introduce a Computer Assisted Learning Language (CALL) for the IBM PC.

"The second generation of CAI programs will concentrate on making the task of authoring computer assisted instruction easier through menu driven authoring systems. The CALL program is an example of such a system," say Gray and Elliot.

Unusual applications of computers in education will be discussed in "Learning Music at the Computer," by Wolfgang Kuhn and Paul Lortton, and "Computers for Exceptional Children: When is the Wedding?" by Dee Johnson, Cleborne Maddux, and Jerry Willis of Texas Tech University.

The growing role of computers in special education will be addressed by a large number of talks at the 8th Faire.

"The Role of Computers in Special Education" will be reviewed by Ann C. Candler of Texas Tech University. Computerized drill and practice, discovery learning, and specific software will be considered.

Another overview of computers and special education will be presented by Cleborne Maddux and Dee Johnson in "The Future of Microcomputing and the Handicap

of Learning Disabilities."

Specific equipment, such as the Optacon, VersaBraille, and speech output systems, will be reviewed in "What can Computers do for the Visually Handicapped?" The speakers, Virginia Sowell and Vivian Correa of Texas Tech University, will discuss the value and education implications of using computers with the visually handicapped.

"Computer Usage with the Severely/Multi-Handicapped" will be the topic discussed by Thomas and Donna Irons of Texas Tech Univer-

sity. The educators assert that "access to a carefully selected and highly adapted personal microcomputer is equivalent to the acquiring of vision, hearing, or physical dexterity" for the severely handicapped.

Computer literacy will be the topic of two talks at the Faire, "Computer Tutor Project: Computer Literacy in the School" by Joan Targ and "Computer Prep: Considerations for a Pre-College Computer Science Curriculum" by Monty Swiryn. The speakers, who are from the San Francisco Bay area will discuss the state of

computer literacy and whether students who wish a computer related career are being adequately trained.

Meeting Someone at the Faire??

Suggestion: Ask friends and associates to meet you in the balcony area of the Civic Auditorium. Specify the left, right, or center section. It has ample seating and overlooks the Civic Auditorium exhibition area.

Note: The public address system is NOT available for paging individuals, except for medical emergencies.

1/18/83

"For my money the Computer Faire is the most important show of the year"

Jerry Pournelle, computer & sci fi author, Byte, July, 1982

The Computer Faire is the only micro convention that has had six major write-ups in Byte magazine, including two articles about the 7th Computer Faire, last March. It is the largest and best-reputed end-user micro convention in the U.S.

The 7th Computer Faire drew over 36,500, had more than 120 Conference speakers, and over 450 exhibitors.

The 8th West Coast Computer Faire is happening in early '83 at the beginning of San Francisco's Spring season. It is expecting 100 speakers (over 160 Speaker Kits have already been distributed), and had rented all of its 690+ exhibit spaces to over 350 exhibitors three months before the March Faire.

• Major Conference Program

To name a few expected sessions:

Tutorials for Novices
Educational Computing
Business Applications
Biomedical Computing
Legal Aspects & Applications
Hardware Design
Software Packages
Applications Systems
Conference Proceedings over 400 pages

• Massive Product Exposition

If it's significant, it's being exhibited.

To name a few products being exhibited:

IBM, Apple, Osborne, Radio Shack, Heath/Zenith, TI, Commodore, RCA, CompuPro, Casio, Unix, PCDOS, CP/M, Oasis, dbase II, SuperCalc, Peachtree, InfoSoft, Select, Byte, Interface Age, Creative Computing, InfoWorld, Datamation, PC World, Dr. Dobb's Journal, Buss, Compute!, Dialog, Jade, Broderbund, Adventure International, Dysan, 3M, Maxell, On-Line, Software Toolworks, and many, many more.

• User Group & Special Interest Meetings

Including: IBM PC, Apple, Osborne, TRS-80, Heath/Zenith, etc.

• For more information call: Computer Faire, 345 Swett Road, Woodside, CA 94062 (415) 851-7077

Ask for your FREE subscription to the Faire's Silicon Gulch Gazette.

THE 8TH WEST COAST COMPUTER FAIRE

SAN FRANCISCO

CIVIC AUDITORIUM & BROOKS HALL

MARCH 18-20, 1983

IBM PC Innovations

Multiplan for IBM PC

Microsoft's advanced electronic worksheet, Multiplan, is now available from IBM for the Personal Computer.

This brings to 12 the total number of Microsoft products IBM has selected since introducing its popular computer in August 1981.

Working closely with IBM since the Personal Computer's inception, Microsoft furnished the original operating system (DOS); IBM's Basic interpreter and compiler; three other languages (Fortran, Pascal and Cobol); a macro assembler and four other application packages: Typing Tutor, Microsoft Decathlon, Microsoft Adventure and Time Manager.

Microsoft's Multiplan for the IBM Personal Computer will have the full capability of the planning and modeling software tool. In addition, Microsoft customized Multiplan to

take advantage of the full IBM keyboard, including function keys. Users also have the added capability of "painting" blocks or windows of information selecting from a pallet of 16 colors.

To date, more than 25 companies have announced support for Multiplan, including Digital Equipment Corporation, Wang Laboratories, Sirius Systems Technologies, Zenith Data Systems, Burroughs, Xerox, Texas Instruments, Fortune Systems, Mitsubishi and Olivetti.

Microsoft also markets Multiplan for Apple II and for computers using the CP/M-80 operating system, including the SoftCard system for Apple computers.

Microsoft's Multiplan software is used for tasks such as resource planning, economic forecasts, sales projections and financial analysis.

Faire Conference presentation

IBM Personal Computer Group to Address Hardware & Software Producers & Entrepreneurs

Four to five technical specialists from IBM will provide an in-depth discussion of major technical aspects of the IBM PC at the 8th Computer Faire. Still being finalized at press time, the speakers in this program will be engineering and software professionals and managers affiliated with IBM's Personal Computer Group in Boca Raton, Florida.

They will discuss details of the hardware, interfaces, and software for the IBM PC. They will also detail the entrepreneurial opportunities and submissions program for the IBM-run software library for the PC.

This is a technical session designed for serious computer professionals and entrepreneurs interested in developing

hardware and software for the IBM PC market.

An editorial note: We wish to applaud the significant value of such active support of independent innovation and development by a corporation of the stature and quality of IBM. It serves the micro user community well. It serves the micro industry well. It serves IBM well. And, most particularly, this actively cooperative attitude towards other hardware and software producers is a service to the future.

It is a delightful return to the cooperative spirit of microcomputing's early years — a spirit that fostered much of the explosive innovation and rapid improvement that brought this industry to its current state in just eight short years.

The screenshot shows a menu bar with options like Alpha, Blank, Copy, Delete, Edit, Format, Goto, Help, Insert, Lock, Move, Name, Options, Print, Quit, Sort, Transfer, Value, Window, Xternal. Below the menu is a command line: R18C2, 80% Free, Multiplan: SORT. The main area displays two tables of data. The left table is titled 'Region 1 Sales: January 1982' and lists sales figures for various districts. The right table is titled 'Sales Rep Rankings' and lists sales representatives and their totals. Both tables include columns for District, Salesperson, and Total Sales.

IBM PC Form Processing Database

Applied Software Technology has released an IBM PC version of the VersaForm Business Form Processor, software originally designed for Apple II, Apple III, and Apple-compatible hard disk systems such as ProFile and Corvus Omnimet.

The IBM PC version shares a standard VersaForm user interface. Current VersaForm users can implement their form templates on an IBM PC without modification.

The IBM PC version, compiled under version IV.O of UCSD Pascal, implements several hardware features of the IBM system. Multimode reverse screen video for easier data entry; full "function key" support to speed command selections; the use of floppy disk drives of up to 400 Kbytes per diskette for increased data storage capacity; the utilization

of main RAM memory as a logical disk drive (384 Kbytes of a maximum of 512 Kbytes permitted on the IBM PC) are standard PC version features.

Exchange of forms data is permitted between Apple II/III and IBM PC Systems, regardless of source machine, through a communications sub-system (e.g. modem, local area network, etc.) or a hard disk network (e.g. Corvus, Omnimet, Santa Clara Systems SCS-series, etc.). System requirements for the IBM PC version are 128 Kbytes of system memory (RAM) and two double sided floppy disk drives.

IBM PC VersaForm costs \$389. For more information, contact: Applied Software Technology, 14125 Capri Dr., Los Gatos, CA 95030, (408)-370-2662.

PC WORLD DAY AT THE FAIRE

March 19th at the West Coast Computer Faire PC WORLD magazine will present an entire day of demonstrations, seminars, and panel discussions with some of the most highly respected professionals in the microcomputing field.

Find out what the PC phenomenon really means, where second generation software is going, all about PC Systems Software, and all about multiprocessing and communications. Participate in software demonstrations like Q Unix, Lotus 1, 2, 3, MBA, and many more. You will talk to the people who know the products.

Listen to what these people have to say about personal computers: Portia Isaacson, President of Future Computing; Martin Alpert, President of Tecmar; David Bunnell, President and Publisher of PC WORLD; Ron Posner, Chairman of National Training Systems; Andrew Fluegelman, Editor of PC WORLD; Gary Kildall, President of Digital Research; Chuck Irvine, Chief Engineer of SofTech Microsystems; Chris Larsen of Microsoft; Mitchell Vapor and Vern Rayburn of Lotus Development Corporation; Alan Boyd, Product Acquisitions Manager of Microsoft; Rod Kenyon of Compac Portable Computers; Steven Cook, Senior Technical Editor, and Karl Koessel, Programming Editor from PC WORLD.

Meet all the editors from PC WORLD magazine. Ask them questions, hear them speak on telecommunications, software and hardware, peripherals, and much more.

PC WORLD Day events will be held in the ballroom of the San Franciscan Hotel, one block from Brooks Hall. PC WORLD Day will be held March 19th in conjunction with the 8th West Coast Computer Faire. Registration for three days, including Conference and the show, is \$15. For more information and pre-registration prices, contact: Computer Faire, (415) 851-7077.

Free Future Copies of the Silicon Gulch Gazette

Just send your name and mailing address to Computer Faire, 345 Swett Road, Woodside CA 94062

JAPAN MICROCOMPUTER SHOW & TECHNICAL TOUR

MAY 20 - JUNE 3, 1983

○ Japan ○ Taiwan ○ Hong Kong ○

This Tour is Designed to Help You:

- Establish direct contacts with foreign manufacturers.
- Purchase computer components at low cost.
- Locate supply sources for your products.
- Obtain use of foreign manufacturing facilities.
- Establish joint programs with foreign firms.
- Preview microcomputer progress in Japan.
- Establish foreign agents for your products.

FOR FURTHER INFORMATION, PLEASE CALL OR RETURN COUPON.
(Microcomputer Tour)

NAME _____

COMPANY _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

COMMERCE TOURS INTERNATIONAL
870 Market Street, Suite 740 San Francisco, CA 94102
Tel: 415/433-3072 Tlx: 278124 CTI UR

Warren Announces First IBM PC Faire

Major Product Exhibition and Conference Slated for August 26-28 in San Francisco

The organizers of the West Coast Computer Faires have announced their "First IBM PC Faire," to take place in San Francisco's Civic Auditorium and Brooks Hall, August 26-28, 1983. The IBM PC Faire will focus on hardware, software, and applications for the IBM Personal Computer. It will include a major Technical Conference, a large product exposition, and a number of user group meetings. Organizers project an attendance of 20,000 to 30,000.

CALL FOR CONFERENCE SPEAKERS

"We have just issued a call for speakers and participation in the Technical Conference of the IBM PC Faire, and expect at least 60 to 120

speakers," said Jim Warren, Faire Chair. "We have always felt that information exchange is the essence of any major computer convention, and put considerable effort into creating a large technical program of well-qualified speakers." The PC Faire will also publish a *Conference Proceedings* expected to exceed 350 pages.

HOW IT STARTED

"Several months ago, we announced an IBM PC Hall within the 8th Computer Faire, being held this March in San Francisco," said Warren. "We expected a positive response, but frankly, we were amazed. The PC Hall sold out of space in less than 10 days! We now have about two dozen companies on a waiting list for

any possible opening. That's what gave us the idea for the PC Faire."

MAJOR EXPOSITION EXPECTED

The trade exposition is expected to be comparable in size to the massive exhibitions at the West Coast Computer Faires.

"Almost every PC-oriented company to whom we have mentioned the PC Faire has expressed an immediate, active enthusiasm for the event and has requested exhibit information. They like the focus on the IBM PC; they like the timing, and they like the location," commented Warren. He pointed out that the convention occurs at the best time of the year in one of the nation's most popular tourist cities,

allowing attendees and exhibitors to combine business with their summer vacations.

LARGE ATTENDANCE LIKELY

"We drew over 36,500 to the 7th Computer Faire, last Spring, and are expecting well over 40,000 for the 8th Faire, this March," Warren observed. "Every time I've mentioned plans for the PC Faire to computer groups, I have encountered nothing but active interest and enthusiasm. Based on this response, our drawing ability for the Spring Computer Faires, and the 105,000-circulation of the Faire's *Silicon Gulch Gazette* newspaper - heavily biased to the west coast - I feel our 20K to 30K attendance projection is very reasonable."

New Data Reporter for IBM PC

Synergistic Software has released The Data Reporter for the IBM PC, a new database management software package.

It is written in machine language and Basic, and has many features including search and sort routines to manipulate files, file merge, a reformatter, global editing, menu driven commands, a label making utility, and data calculation abilities.

The Data Reporter package includes sample setups with data to help users learn its features, as well as optional password protection, batch file processing of recurring tasks, a fully copyable disk, and seven different types of search routines.

Conference Session

Author, Author!

Your Role in Computer Book Publishing

"My objective is to present a short history and a look into the future of microcomputer book publishing, as well as a strong argument - I hope - for your writing a computer book," says Raymond Collins of his 8th Faire talk "Your Role in Computer Book Publishing."

Collins, a vice president of Tab Books, Inc., will explore areas of interest to all novice computer book

Two more accessory packages will be available early this year. The Report Writer has basic word processing capabilities which help users create form letters, financial reports, and documents. A statistical and plotting package allows users to graph data in the database.

The IBM Data Reporter costs \$250, while the Report Writer and statistical package will be \$100 each.

The IBM Data Reporter requires an IBM PC with 64K and MS DOS. For more information, contact: Synergistic Software, 830 N. Riverside Dr., # 201, Renton, WA 98055, (206)-226-3216.

DISTRIBUTE FREE GAZETTES

The Computer Faire would be pleased to ship you any reasonable quantity of *Gazettes* you wish to request, for distribution to your friends, professional associates, and fellow employees. These are available without cost; the Faire will pay all charges, including UPS shipping fees.

Just write or call and tell us (1) how many you wish to receive, and

TO FRIENDS & ASSOCIATES

(2) where to ship 'em (it must be a street address: UPS is prohibited from delivering to a P.O. Box).

Typically, a *Gazette* will include a variety of information of general interest, as well as - of course - all the details of the forthcoming West Coast Computer Faire. Call or Write: Computer Faire, 345 Swett Road, Woodside CA 94062, (415) 851-7077.

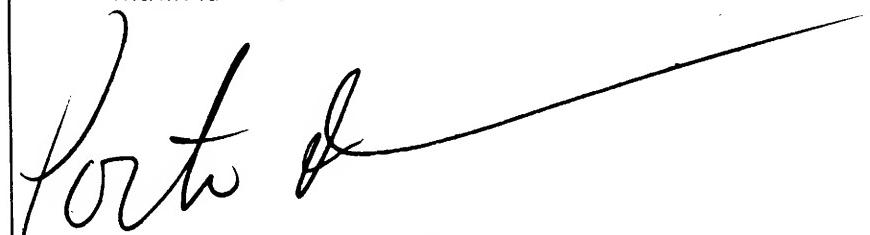
Future Computing Incorporated announces

The Fortune 1000 Personal Computer Market Forum '83

A symposium for businesses dedicated to meeting the small computer needs of large corporations.

March 21-23
The Mark Hopkins
San Francisco
(Immediately following the
West Coast Computer Faire)

"This is a new market, and in many ways, a unique market. Our forum addresses the market size for the Fortune companies, their special concerns, and the resulting issues that face hardware and software manufacturers, retailers, distributors, and direct sales forces that want to penetrate this market. There's a lot of competition and the big winners will have a clear understanding of their market, and their place within it."



Dr. Portia Isaacson
President and Chief Executive Officer
Future Computing Incorporated

For a complete agenda, please call:

Seminar Sales
Future Computing Incorporated
214 783-9375

FUTURE COMPUTING INCORPORATED
900 Canyon Creek Center
Richardson, Texas 75080
Telephone 214 783-9375
TELEX Number 80-4294

Conference Session

Make Money with Your Computer

"Many people are torn between a vision of a computer as a toy, an educational aid, a hobby and a money-making tool. For those who want to get the most economic benefit from a computer a major perceptual reorientation is necessary," says Robert Ramers, President of Computer Alternatives in San Rafael, California. "If you can develop a mental discipline which allows you to think of a computer in the same way you would think of a bulldozer if you were planning to build a house, you are on the way to developing the mental attitude necessary to make money with a computer."

In his 8th Faire talk, "How to Make Money With a Computer," Ramers will tell listeners how to make money with a computer whether you use it in an existing business or want to start a computer-based business of your own. He will discuss how to know if you're a hobbyist or business person, how to choose your equipment and define your money-making objectives, how to identify the lowest and highest paying computer applications, and more. He will also report on the tax benefits involved in financing your computer with a purchase/lease agreement.

Isaacson, Renowned Industry Analyst, Endorses PC Faire

Dr. Portia Isaacson, President of Future Computing, Inc., and one of the microcomputer industry's best-known market analysts, has issued the following statement:

"Jim Warren's IBM PC Faire will make a major positive contribution to the IBM Personal Computer industry and to the microcomputer user community, as have his annual West Coast Computer Faires of the past half decade. I recommend attending, exhibiting, and speaking at the IBM PC Faire in San Francisco, next August [August 26-28, 1983]."

She went on to state: "I also regard Warren's West Coast Computer Faire to be one of the three or four most significant computer conventions each year, because it always offers an unusually large number of

introductions of particularly innovative new products."

Dr. Isaacson's market analysis group, Future Computing, is the only market research firm that specializes exclusively in the personal computing marketplace. They are currently giving special attention to the IBM PC. On January 31 - February 2, 1983, they will be conducting the industry's first seminar focusing on the "IBM PC Compatibles - A Software/Hardware Market Forum." It will address the opportunities and issues for IBM PC compatible products that have developed around the PC from a software, hardware, and marketing perspective.

The Forum is already heavily subscribed with a considerable array of leaders from many of the best known

companies in the PC industry as speakers and attendees. The Forum has about 25 speakers, including:

John Pertell, Manager, Sears Business Sys Ctrs.

Thomas Tower, Marketing VP, VisiCorp

Marian Murphy, Operations VP, ComputerLand

Bob Harp, Chairman, Corona Data Systems

Murray Bell, President, Dynalogic (Canada)

Joe Harmon, Merchandising VP, CompuShop

Rod Canion, President, Compaq

Bill Krause, President, 3Com

Thomas Hong, President, Davong

Marty Alpert, President, Tecmar

Bill Baker, President, IUS

Dr. Isaacson has also invited Jim Warren to be one of the Forum's speakers, addressing issues surrounding effective use of periodicals and trade shows for marketing and promotion. Warren was the first editor of the earliest software-oriented magazine, founded the industry's first two microcomputer newspapers (the "Silicon Gulch Gazette," and "InfoWorld"), and currently publishes "DataCast," focusing on in-depth software tutorials and mass digital telecommunications. He is also the founder and Chairman of the West Coast Computer Faires, the only microcomputer conventions to have had six major write-ups in Byte magazine.

Video Initiative Introduces Tapes for Learning

Videotape well may be the wave of the future for providing introductory tutorials to users of new computer systems and software. With over three million video cassette recorders (VCR's) in the U.S., this is a hot new area for computer instruction.

It is well-recognized that a color, sound, audio-visual presentation is the next best thing to an in-person tutorial, to introduce people to a new subject. Also, if you think about it, one or two entire generations may be more accustomed to getting their daily information from a television set than from the printed word. Videotape tutorials are a natural for those folks.

PRODUCT-SPECIFIC INSTRUCTION

Video Initiative, a division of Initiative, Inc. (II), of Woodside, California, is producing such tapes. Within the next several months, they will complete a number of tutorial tapes, including ones covering such topics as: VisiCalc, the IBM PC, CP/M, etc.

These tapes are not vague overviews. They provide explicit instruction about specific systems - e.g. Advanced VisiCalc on the Apple III, or

a new user's introduction to the IBM Personal Computer. Each tape is accompanied by a workbook, to be used with the tape, to further enhance the effectiveness and impact of the instruction. Each tape is designed for use by a single individual who can start and stop the VCR as they are watching the tape, performing the exercises on their computer, and using the accompanying workbook.

INDEPENDENT OF VENDORS

Video Initiative's tapes are straight instructional tapes; not promotional tapes from vendors of the hardware and software being presented. Although the writing and production teams are working closely with the product vendors to assure accuracy and timeliness of the material, Video Initiative is entirely responsible for the production of their tapes.

Initiative, Inc. founder Jim Warren commented, "We are establishing ourselves as an excellent source of high-quality, independently-produced information detailing how to use computer hardware and software. We value that reputation, and fully expect to enhance it with this video venture."

HIGH-QUALITY VIDEO WORK

Each tape is - as they say in the television industry - "highly produced." That is, the production techniques that are customary and expected in first-rate television documentaries are being used in these tapes. These include use of voice-over, freeze-frame, split screen, close-ups, special effects, and much more, to maximize the efficient and effective presentation of information to the new user of a computer or specific piece of software.

This is a far cry from some of the early tapes this industry has seen, that were little more than a lecturer giving a chalk-talk before a camera.

VIDEO INITIATIVE HAS COMPUTER & VIDEO EXPERTS

Initiative, Inc., was created by Jim Warren, a long-time computer professional, well known in microcomputer circles. He has been a computer consultant in the San Francisco Bay area since the late '60's. He has chaired various organizations of computer professionals, founded the West Coast Computer Faires, and created both of the micro industry's two newspapers - the publication now known as "InfoWorld," and the "Silicon Gulch Gazette." He was

also the first Editor of "Dr. Dobb's Journal," and founded and is currently the Editor of "DataCast," the first "magabook" to offer a series of in-depth tutorials covering major microcomputer software systems.

Warren has well over ten years' teaching experience. He was first involved in computer education around 1960, working on a high school student enrichment program using an old, drum-memory IBM-650. He has taught in Stanford's Computer Science Department as well as at San Jose State and San Francisco State. He has taught over commercial television (KPIX-TV, San Francisco) and taught a number of computer courses over Stanford's closed-circuit Engineering School television system that serves much of Silicon Valley. He holds two graduate degrees in computing (Stanford, and University of California), and two more degrees in mathematics.

And, he has hosted the "Computer Chronicles," the first weekly television show to presume a computer-literate audience. It has now aired on about 40 PBS affiliates, throughout the U.S.

Video Initiative's Producer is David Carlson. Carlson has worked in documentary and instructional television for years, including stints with the McNeil-Lehrer Report and a number of projects for the College of San Mateo - one of the best-known junior colleges in the San Francisco Bay area.

Similarly, Director Dave Ratto has considerable experience in high-quality video production. Warren commented, "Dave Ratto is as much of a video fanatic as I am a computer fanatic. His abilities in directing and using video technology for top-notch results are really impressive."

Warren's video group is working closely with industry writers in scripting the instructional videotapes and in creating the workbooks. Among others, they have been working with Lasselle-Ramsay, a writing and training team that recently spun off from Hewlett-Packard where they had extensive experience in both training and documentation.

Video Initiative is at 345 Swett Road, Woodside CA 94062.

Gossip...

(continued from page 2)

employed staff quickly struck a deal (this time with legal eagles eyeballing every comma) and "PC World" came into existence. This was less than enchanting to Ziff-Davis.

Now, Z-D is trying to get an injunction against McGovern's using the name "PC World"; there is litigation galore; and plenty of attorneys are soaking up a lot of energy that could much better be spent serving the community.

Footnote: We do find Z-D's objection to the name of the new publication rather questionable. Having written for this industry since its creation in 1975, we can well testify that "pc" has a long history of generic usage as an abbreviation for "personal computer," dating back to its first use by John Dilks to refer to his first personal computing fest-

tival in Atlantic City, that he called "PC'76".

However, reason often has little to do with the law. To lift lines from Heinlein's *Stranger in a Strange Land*, "Straining at gnats and swallowing camels is a required course in law schools."

GLORIOUS GODBOUT

Wild Bill Godbout - the honcho behind Godbout Electronics and their CompuPro product line - is one of the micro industry's more delightful and notable iconoclasts.

He made his financial nut, back in the early '60's when - as an EE fresh out of college - he went to work for IBM, joining 'em just when they were stampeding to get a product completed. So, he worked, day and night. So, IBM paid him lots o' overtime. So, he put it in IBM stock . . . which doubled, and

doubled again. Q.E.D.

Being just ever so slightly different than your standard 30-year wallflower employee, Bill spun off from Ma IBM to pursue various entrepreneurial ventures. Now, you gotta understand - Bill doesn't just "march to a different drummer." He tells the drummer what syncopation to beat. E.g.:

He started Godbout Electronics as a components mail-order operation. It quickly gained the reputation of being one of the most reliable mail-order operations in the industry. Typical of Godbout, his system operated as follows:

He didn't advertise what he didn't have. (See? That's proof that he's an industry eccentric.) The same day an order arrived, it was shipped. The completed order form was then placed in a shoe box, LIFO (to the

(continued on page 10)

The IBM PC Faire

SPEAK!

at the

IBM PC FAIRE

San Francisco Civic Auditorium & Brooks Hall

August 26-28, 1983

Comprehensively Comment on Your Complex Computer Calisthenics
Eruditely Explain Examples to Excited Educators
Tutorially Talk of Your Tantalizing Technotoys
Describe Your Daring Digital Deeds

TALKS WILL BE PUBLISHED

in the *Best of the First IBM PC Faire*

Deadline for Abstracts & Camera-Ready Papers is

Call Now!

June 14, 1983

-or-

CREATE!

Have a Topic of Special Interest to You?

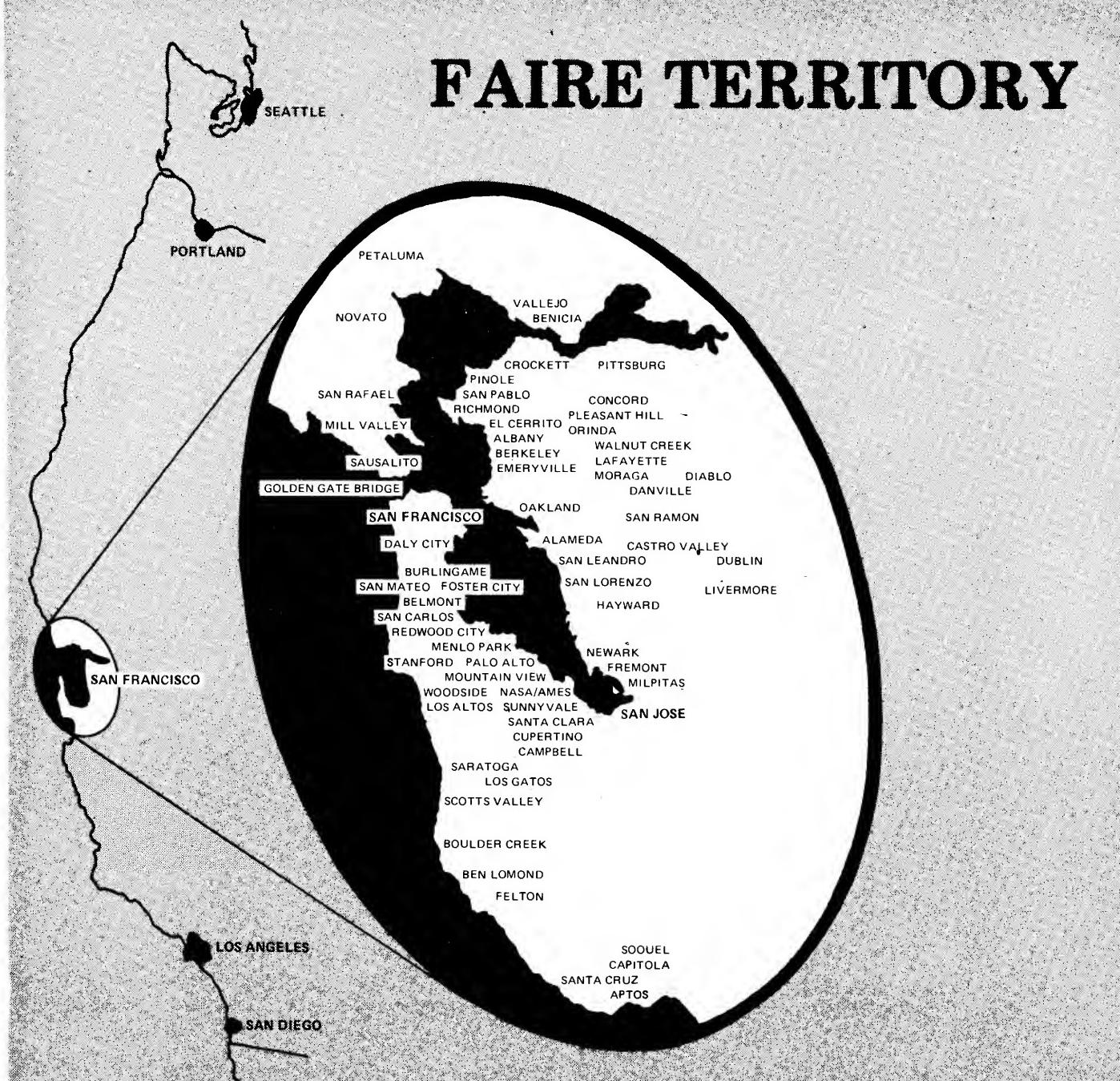
Create & Lead Your Very Own Conference Session

Choose Your Own Topic(s)

MEET!

at the IBM PC Faire

FAIRE TERRITORY



Foreign Tourists Flock to the Faire

As always, foreign visitors will make the Faire an exciting and informative event.

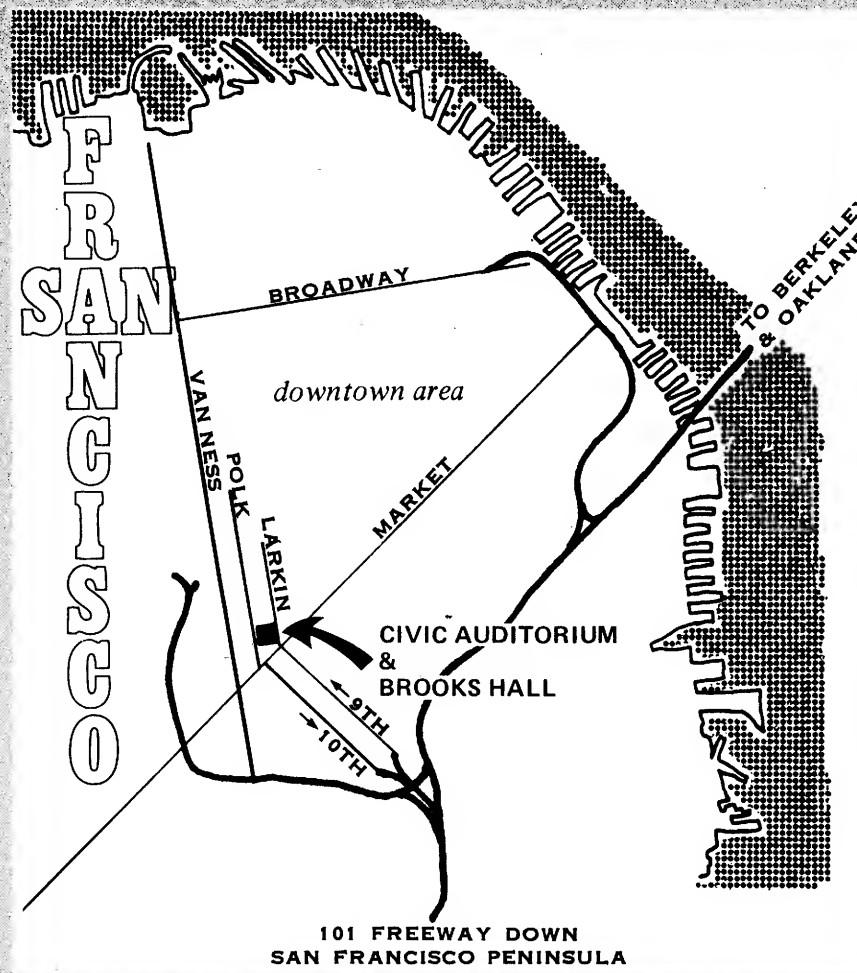
A group of Japanese people will visit the Faire on a tour organized by The Japan Microcomputer Club. For more information, contact: The Japan Microcomputer Club, Rm. 313, 3-5-8 Shibakoen Minato-Ku Tokyo 105, Japan.

There is a proposed West Coast Computer Faire tour out of Singapore. For details, contact: American Embassy Commercial Attaché, 30 Hill St., Singapore 0617, Republic of Singapore.

For Rapid Transit Use BART

Need rapid transit while you're visiting in the Bay Area? Use the Bay Area Rapid Transit System (BART). Trains run seven days a week, 365 days a year, Monday through Saturday, from 6am to 12 midnite, and Sunday, from 9am to 12 midnite.

For more information and a system map, contact: BART, 800 Madison, Oakland, CA 94607.



Venture Capital for High Tech Entrepreneurs to be Discussed at 8th Computer Faire

The 8th West Coast Computer Faire, in San Francisco March 18-20, will include an in-depth, 3-hour Conference program of special interest to computer innovators: "Venture Financing for New Technology Companies." This session will be composed of two panel presentations, organized by J. Michael Murphy, President of Pacific Technology Advisors.

Chaired by Frank Kline, the Managing Director of Pacific Technology Venture Management, the first panel includes J.K. Morris, Editor of the "Venture Capital Journal", S. Mendelow and C.A. Tepper, the President and Senior VP of QC Resource Group, and D.L. Larson of R&D Funding.

The second panel will be Chaired by Michael Murphy, and will include J.D. McCamant of the California Technology Stock Letter, T. Fletcher of Rothschild, Uterberg & Towbin, and D. Woodman of Woodman, Kirkpatrick & Gilbreath.

The first panel will cover a variety of topics, including preparation of a business plan for venture capitalists, the relationship between venture groups and entrepreneurs, strategic planning, and how to approach product and prototype development.

The second panel will range over such topics as institutional vs. individual investing, technology stock investments, effective use of stock brokers, and inside details of how to "go public."

Though these are panel sessions, three of the panelists have submitted formal papers that are included in the published *Conference Proceedings of the 8th West Coast Computer Faire*.

Conference Session

Campy Computers

"Computer camps for children are an outgrowth of the mushrooming computer literacy movement in the United States today," says Thomas Copley, executive director of Yellow Springs Computer Camp, Yellow Springs, Ohio. In his 8th Faire talk, Copley will discuss the joys and frustrations of starting an independent, non-profit day camp that offers riding, swimming, unicycle riding, and other activities, as well as computing.

Conference Session

System Impacts of 32 Bit Micros

Thomas Johnson, a Motorola systems engineer will paint a bleak picture of the possibility of fully utilizing new 32-bit processors in his 8th Faire talk "System Impacts of 32-Bit Microprocessors." He will discuss areas of hardware and software design that should be examined before embarking on a 32-bit design.

"It is imperative that prior to starting a 32-bit design, the overall system be closely examined for possible performance flaws, and the question be asked: 'Does this design REALLY require a 32-bit processor?'" says Johnson. "It is better that more performance be pulled from one of the existing 16-bit machines than idling one of the 32-bit monsters, just so the marketeer can say he has a 32-bit system."

Avoid Long Lines, Pre-register for the Faire!

Although the Computer Faire, itself, is not staffed to handle preregistration, it has arranged for a number of sources for preregistration.

The stores prefer that you drop by to pick up your prereg - they'd like to see you and have you see what they have to offer. ("Know your dealer.") However, should you be unable to do so, several of them - marked below by an asterisk - are accepting mail orders, IF you do the following:

1. Phone the store for their reg fee. By FTC regulations, the Faire cannot tell them what to charge. Send full payment, and a stamped, self-addressed, legal-size envelope.

2. Send your mail order in time to reach the store by March 1st. (Remember, the U.S. Mail Service will be handling its delivery in both directions.)

Data Domain of Schaumburg

1612 E.Algonquin Rd
Schaumburg IL 60195
(312)-397-8700

Opamp Technical Books

1033 N.Sycamore Ave
Los Angeles CA 90038
(213)-464-4322

Computerland

289 E.Highland Ave
San Bernardino CA 92404
(714)-886-6838

Computer Ware

6791 Westminster Ave
Westminster CA 92683
(714)-891-2584

MicroXchange

222 E.Carrillo St #101
Santa Barbara CA 93101
(805)-963-9441

Coastal Computers

986 Monterey St
San Luis Obispo CA 93401
(805)-543-9339

Micro Pacific Computer Ctr

5148 N.Palm
Fresno CA 93704
(209)-229-0101

National Computer Ctr

3202 E.Ashlan Ave
Fresno CA 93726
(209)-227-8479

ZacKit/Monterey *

1193 10th St
Monterey CA 93940
(408)-375-3144

Affordable Computers

716 A Lighthouse Ave
Pacific Grove CA 93950
(408)-373-7177

Computerland - Belmont

1625 A El Camino Real
Belmont CA 94002
(415)-595-4232

Computerland - Burlingame

264 Lorton
Burlingame CA 94010
(415)-348-7731

Lotus Century

Westlake Shopping Ctr
64 Westlake Mall
Daly City CA 94015
(415)-992-5230

Computerland

4546 El Camino Real
Los Altos CA 94022
(415)-941-8154

Keplers Books

821 El Camino Real
Menlo Park CA 94025
(415)-324-4321

Byte Shop

1415 W.El Camino Real
Mtn View CA 94040
(415)-969-5464

Digital Deli

80 W.El Camino Real
Mtn View CA 94040
(415)-961-2670

Mission Computer Ctr

2065 B El Camino Real W
Mtn View CA 94040
(415)-964-7063

Heathkit

2001 Middlefield
Redwood City CA 94063
(415)-365-8155

Computer Plus

1328 S.Mary Ave
Sunnyvale CA 94087
(408)-735-1199

Arrow Computer Supply

1301 Harrison St
San Francisco CA 94103
(415)-864-0917

AIDS Computer Ctr

271 Sutter St
San Francisco CA 94108
(415)-434-BYTE

Computer Connection

214 California St
San Francisco CA 94111
(415)-781-0200

Computerland - the Castro

2272 Market St
San Francisco CA 94114
(415)-864-8080

Mission Computer Ctr

550 University Ave
Palo Alto CA 94301
(415)-326-9991

Heathkit

6000 Potrero Ave
El Cerrito CA 94530
(415)-236-8870

Byte Shop

1122 "B" St
Hayward CA 94541
(415)-886-2980

Computerland

22634 Foothill Blvd
Hayward CA 94543
(415)-538-8080

Microland Computers

6050 Morway Ave
Newark CA 94560
(415)-790-0410

Best Computer Store

Stoneridge Shopping Ctr
5516 Springdale
Pleasanton CA 94566
(415)-463-2233

Computer Store - San Leandro

701 Mac Arthur Blvd
San Leandro CA 94577
(415)-569-4174

North Bay Computers

6526 Washington
Yountville CA 94599
(707)-944-8885

Computer Store - Oakland

1320 Webster St
Oakland CA 94612
(415)-763-7900

Computer Center Inc

1514 University Ave
Berkeley CA 94703
(415)-845-6366

Technika Berkeley

2120 Dwight Way
Berkeley CA 94704
(415)-841-5323

Berkeley Computer

1569 Solano Ave
Berkeley CA 94707
(415)-526-5600

Computer Room

230 Mt Hermon Rd #210
Scotts Vly CA 95066
(408)-438-5001

Computer Emporium

5821 Cottle Rd
San Jose CA 95123
(408)-227-5414

Computa-Mania

18285 Hwy 108 #5
Jamestown CA 95327
(209)-984-4221

Santa Rosa Computer Ctr

604 7th St
Santa Rosa CA 95404
(707)-528-6480

Computer Scene

753 S.State St
Ukiah CA 95482
(707)-462-1578

Computer Stores Inc

6041 Greenback Ln
Citrus Heights CA 95610
(916)-969-2983

Computer Store - Corvallis*

2015 NW Circle Blvd
Corvallis OR 97330
(503)-754-0811

GIFFORD COMPUTER SYSTEMS

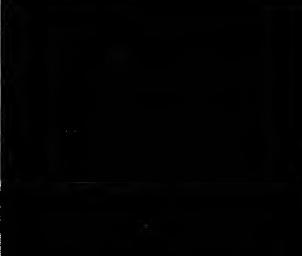
Multi-user computers that keep pace with business and technology.

HARDWARE
8 MHZ 16 bit (8088) CPU
6 MHZ 8 bit (8085) CPU
Up to 1 megabyte 10 MHZ
static RAM
2.4 Megabytes of IBM
compatible 8 inch
floppy disk storage
Up to 80 Megabytes
Winchester disk storage
20 slot IEEE 696/S-100 bus
9 RS-232C serial ports

16 bits - Financial planning



SOFTWARE
MP/M™ 8-16™ including
CP/M-80™
CP/M-86™
MP/M-86™
dBASE II™ Data Base
Management
SuperCalc™ Financial
Planning
WordStar™ Word
Processing (optional)



8 bits - Word processing



You can begin your investment with a single user installation. Then, you can add up to 6 more terminals as your business grows. And you can add more memory as you need it.

It does the job of two generations of computers at the same time.

With a Gifford Computer System you can use any of the thousands of 8 bit CP/M™ programs available. And any of the faster 16 bit CP/M programs, too. If you're using

8 bits - Graphics



CP/M already, your investment in training, software and data is protected. Our systems are designed with your future in mind. With our bus-based system, as new technology becomes available it can be integrated into your computer at an affordable price, protecting your hardware investment.

You get all the support you'll ever need.

We have centers in San Francisco and Los Angeles, with

complete demonstration and support facilities. Call now for a demonstration.

*Gifford Computer Systems.
We're in business for
your future.*

MP/M™ is a proprietary implementation of MP/M® and was configured for CompuPro by G&G Engineering. CP/M and MP/M are registered trademarks of Digital Research. SuperCalc is a trademark of Sorcom. WordStar is a trademark of Ashton Tate. CompuPro is a trademark of Ashton Tate. dBASE II is a trademark of Ashton Tate. CompuPro is a trademark of Goodput Electronics.

*Gifford Computer Systems
is an authorized
CompuPro Systems Center.*

*Not all computers can
lead your business into
the future.*

Buying a multi-user computer system is a big investment in time, training, and money. So you'd better choose a system that won't become obsolete.

16 bits - dBASE II

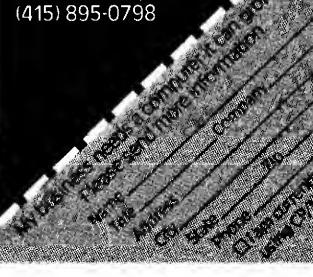


GIFFORD
COMPUTER SYSTEMS

A division of

G&G
ENGINEERING

1922 Republic Avenue,
San Leandro, CA 94577
(415) 895-0798



Gossip...

(continued from page 6)

delight of his bookkeeper and the IRS, no doubt).

GODBOUT MEETS MORROW

When microcomputing came along, he was in a natural position to jump into the newfound micro madness. Bill created an industrial menage-a-trois - he married his own excellent engineering background, with an absolute demand for high quality, and with the equally competent quality services of friend George Morrow. (At the time, among other things, George was a long-time UC-Berkeley Ph.D. candidate, working on such esoterica as mathematical manifolds. No single-talent individuals in Bill's lashup.) Together, they created some of the best-reputed S-100 goodies in the industry.

(Note: Morrow has since spun off and created top-notch systems under such names as Thinkertoys, Morrow's Microstuff, and - now that the industry has become sadly serious and megabucks motivated, his company has the more sedate name of Morrow Designs. Delightfully however, George continues his dedication to very high quality.)

Ever wonder why Godbout Electronics has the unlikely address of the "Oakland Airport?" Oh, that's 'cause Bill is also an flying junkie. So, of course, he owns a flying service. Who knows, it might even be profitable.

There's also an operational B-29 parked at the Oakland Airport, owned and operated by a nonprofit aircraft historical society, of which Godbout is a member.

And, as a final note, Bill also owns a small piece of an Oakland restaurant. It seems that someone once told him, "Own a restaurant, and you will never go hungry." Like everything else he is connected with, the food is top quality.

COMPETENT COMPUPRO

Actually, our recent acquisition of some Godbout gear was what brought Bill to mind as we wrote this column.

Being inveterate computer fanatics, our offices are heavily computerized. Being heavily computerized, we needed a definitively reliable microcomputer system. And, being reasonably knowledgeable of micros, we grabbed a couple Godbout/CompuPro half-megabyte dual-processor systems.

Following the adamant advice we give to prospective computer buyers, we got them through a local dealer - G&G Engineering of San Leandro, who are well worth prominent mention. Run by Mike and Dale Gifford, G&G is much more than just another CompuPro dealer - they are the heavy computer hackers who performed the noticeably nontrivial task of making CP/M-80, plus CP/M-86, plus multiuser MP/M all run on the CompuPro 8085/8088 system (including a 20MB Fuji winnie) - giving that whole mess the name of MP/M-8/16.

The really nice thing about this dual processor 8-bit/16-bit system is that you can take advantage of all the old, robust, well-debugged 8-bit software that has been around for several years, plus have access to (continued on page 20)

Save 26% on Faire Registration

By gathering your friends and associates together, you can all save \$4 on 8th Faire registration fees - paying \$11 each, instead of the \$15 "at the door" fee. (Or, you can "deal" registrations and earn a few extra dollars for yourself or your group.) Here's how:

Purchase Faire registrations in blocks of ten or more, no later than March 7, advancing

\$110 for a minimum order of ten (prepaid). (There is a small shipping and collection charge on COD orders.)

You can return up to half the number of registrations ordered, by March 17 (the day before the Faire), for a refund of \$11 per returned/unused registration.

To take advantage of this offer send your check or COD

order for ten or more registrations (advancing \$110 @ on prepaid orders) to:

Pre-registration Desk
Computer Faire
345 Swett Road
Woodside CA 94062

Include your street address for certified UPS delivery. We pay shipping on prepaid orders. You pay shipping and collection charges on COD's.

Hanover, Germany
April 15-20, 1983

Eight three-hour tutorials will be presented four times each, affording individuals the opportunity to attend any number of tutorials at convenient times. See box at bottom of facing page for schedule.

All tutorials will be held in CeBit North (Hall 1) on the Hanover Fairgrounds, concurrently with Hanover Fair, the largest engineering and industrial exhibit in the world.


Cosponsored by
IEEE Computer Society,
IEEE Region 8, the IEEE
Industrial Electronics Society,
and Hanover Fair,
in cooperation with
des Verbandes Deutscher
Elektrotechniker (VDE).

Co-General Chairmen:
Dr. Charles R. Vick, Auburn University
Dr. H. Troy Nagle, Auburn University

Advisory Committee:
Dr. Gerald Cook, Vanderbilt University
Dr. O. N. Garcia, University of South Florida
Dr. Robert E. Larson, President, IEEE
Dr. H. O. Leilich, Technische Universität Braunschweig/BRD
Dr. J. Mussman, Technische Universität Hannover
Dr. W. Probst, IBM Deutschland GmbH
Dr. P. Fasang, Siemens Corporation
J. P. Fernandez, IBM Research, San Jose
Dr. K. Goser, Fern University, Germany
Dr. J. Baal-Schem, Tel Aviv University

TUTORIAL 3
Local-area Networks: Architecture, Technology, and Applications

Instructor: Dr. Martin Reiser
IBM Zurich Research Laboratory
8803 Rüschlikon/ZH
Switzerland

Course Description: Two forces are driving the quest for communications networks in the local domain: The proliferation of DP terminals and the need for high-speed processor-to-processor interconnections. Owing to the "bursty" nature of data traffic, packet switching is the choice preferred. The technologies in local-area networks which emerged from these requirements are busses and rings. This tutorial treats novel systems from the point of view of architecture technology and application scenarios. The efficiency and reliability of access protocols such as CSMA-CD and token as well as their embedding into the ISO layers are discussed. A special feature of the tutorial is the treatment of electrical engineering considerations. It is shown that transmission and serviceability issues may be as important as the protocol discussion. VLSI is a driving force and designs should be optimized for it. Finally, the impact on systems design of the new networking technology is treated using as scenarios the traditional DP operation, text-processing clusters, plant automation, and distributed server-client architectures.

Announcing the Second

Tutorial Week Europe '83

IEEE TUTORIALS ON COMPUTERS IN INDUSTRY



DURING
HANOVER
FAIR...

TUTORIAL 1

Office Automation Systems

Instructor: Prof. Dr. S. Bing Yao
Database Systems Research Center
University of Maryland
College Park, Maryland USA

Course Description: Over the past few years there has been a dramatic increase in the number of new products aimed at simplifying office work. As a result, office automation is a fast-growing field. Although many research and development projects are organized on the topic, the gap between research and practice is widening and there is no generally acceptable definition of what an office automation system is and what function it must have. This course surveys the areas involved in office automation, reviews recent products and development projects, and discusses present status and future trends. Subjects covered include office functions, office systems technology, communication, work stations, document processing, personal assistants, and planning an automated office.

TUTORIAL 2

Advanced Topics in Computer Graphics with Applications in CAD/CAM

Instructor: Prof. Dr. J. Encarnacao
Institut für Informationsverarbeitung
und Intelligenz Systeme
Technische Hochschule Darmstadt
Darmstadt, Federal Republic of Germany

Course Description: This tutorial surveys computer graphics technology, applications, and trends. Special emphasis is given to the application of graphics in CAD/CAM/CAE. I/O techniques, design of graphics systems, hardware/software tradeoffs, graphics standards (CGA and GES), and man-machine interface problems are discussed. Computer graphics workstations, including the integration of hardware in the local processor and the design of general multi-microprocessor architectures as graphics processors are covered. Algorithms for transformation (e.g., clipping, hidden-line/hidden-surface elimination, raster representation (e.g., shadow, color, transparency), curve and surface approximation, and geometric modeling are presented. The applications of computer graphics are addressed: CAD, CAM and CAE are introduced and discussed in detail. Other applications, such as office automation, and business and management graphics are covered.

Watch Out Tupperware— Distributors Begin Party Plan Computer Sales

Watch out Tupperware. Personal computer companies are beginning to use the same marketing techniques that have made that company, Mary Kay Cosmetics, and Amway so successful, reports a recent article in the "San Francisco Chronicle" newspaper.

A number of people are taking part of the personal computer revolution out of retail stores and moving it into your home with direct and "party plan" methods of sales. At least

two firms are involved in multi-level marketing of personal computers.

Tronics Marketing of Fort Worth, Texas distributes Texas Instruments' TI-994/A home computer. Nearby, the Dallas-based Dynasty Computer Co. is offering a repackaged version of the Exidy Sorcerer computer.

Both firms offer their products using a method that works like this: a friend comes to your home to show you his or her computer. After the demonstration, the friend offers you

the opportunity to purchase one.

If you think you can sell as well as your friend does, you are offered the opportunity to become a distributor of the product and sign on others as distributors. The more distributors you sign on under yourself, the bigger the chance you'll profit from this kind of sales.

Officials of both firms say that this kind of personalized service makes computers less threatening to prospective buyers.

"The person who knows little or nothing about computers enters a computer store, and often the store personnel talk at a level far above his understanding, or just don't have time to explain computers," Larry Hagerty, president of Dynasty Computer Co., told the Chronicle.

"Our salespeople, by comparison, are the customer's neighbor, friend, relative, or business associate. They are willing to take the time to show the customer what the computer is capable of," he added.

TUTORIAL 4

Process and Numerical Control

German language only.

Instructor: Prof. Dr. R. Lauber
Institut fuer Regelungstechnik
University of Stuttgart
Stuttgart, Federal Republic of Germany

Course Description: This tutorial provides basic knowledge and methods of automation functions and structures of process and numerical control systems, with special emphasis on the interaction of hardware and software in distributed microcomputer systems. Systematic and computer-aided development of control computer systems hardware and software are covered. Based on a model of the development process, computer-aided methods and tools are explained. Software engineering techniques for process automation are presented, including an overview of real-time control strategies and programming languages. The role of computer aids for achieving reliable, safe software and quality control is stressed. Industrial examples of process and numerical control systems are used to explain methods.

TUTORIAL 5

Robotics: Electronic Control Systems

Instructor: Dr. John F. Cassidy, Jr.
General Electric Company
Schenectady, New York USA

Course Description: An understanding of the computer-based electronic control system is crucial to the application and effective use of robotics technology. This tutorial answers the question, "What is a Robot?" by discussing robot configurations, functions, and applications and describing the various components of a robot system. The purpose and functions of the controller are defined and then illustrated with a typical controller architecture and implementation. Programming the controller to allow the robot to carry out its intended task is perhaps the most difficult aspect of effectively applying robot technology. Both offline methods and teaching approaches are described with emphasis on why the programming task is so difficult. Control strategies, sensor-based control, and communications are covered. A typical application example including a review of potential problem areas that may occur during set up, programming, and real-time operations is discussed.

TUTORIAL 6

Microcomputer Design Tools and Applications

Instructor: Prof. Dr. Tom Cain
Electrical Engineering Department
University of Pittsburgh
Pittsburgh, Pennsylvania USA

Course Description: The development of microprocessors and related solid state devices has led to a greatly expanded range of computer applications. Many of these new applications fall into a class which can be characterized as embedded systems, i.e., systems in which the microprocessor/microcomputer is an integral part of a larger system. The design requirements for these new systems have led to the development of a new class of digital system design tools. This tutorial reviews the integrated circuit developments that made this new class of applications possible and studies several applications that show the need for the new design tools. With this basis the new design tools are introduced within the framework of successively higher levels of design environments. Each design tool is characterized functionally; however, the emphasis is on the role in the design process.

TUTORIAL 7

Design and Trends in Home Information Systems

Instructor: Dr. Jacob Baal-Schem
Tel Aviv University, Israel

Course Description: Among the most salient outcomes of recent developments in microelectronics and computer technology is the advent of Home Information Systems. Innovations in computers and communications will enable us in the near future to work from the home, shop from the home, get our education in the home, and conduct most of our daily life through home-based electronic systems. This tutorial presents the basic concepts of recent advances in home information systems, from Teletext to interactive two-way wideband networks. It discusses the different systems developed in Europe, the US, and Japan and analyzes their technical characteristics. Cost considerations are discussed, along with forecasts for future implementation of information systems in post-industrial society. Different scenarios of acceptance are presented and possible social impacts are discussed. The tutorial concludes by discussing ways to prepare society to cope with future home information technologies.

TUTORIAL 8

Personal Desktop Computer Market

Instructors: Dr. Portia Isaacson
Dr. Egil Juliusen
Future Computing, Inc.
Richardson, Texas USA

Course Description: This tutorial provides overviews on the most successful products and manufacturers in the \$1K, \$3K, and \$10K personal/desktop computer markets. These overviews include profiles of similarities and differences for these three price categories, product specifications for each market segment, applications required for each product segment, peripherals necessary for each computer market, and who buys and why in each market segment. The present market trends of the personal/desktop computer market and expected trends for the coming five years are detailed. Analyses are based on research data for all areas pertinent to this market and market indicators on future expectations.

Third Edition of CP/M Index

The third edition of the Small Systems Group's "CP/M Software Index" has just been published. The Index lists 1688 professionally supported programs, offered by 507 vendors. A brief description, the vendor's name, address, and phone number, the price, and operating system versions are shown for each package. All indexed programs are available for the CP/M-80 operating system and many are also available under CP/M-86, MP/M-80, MP/M-86 and Concurrent CP/M-86.

The Index is organized into five major areas: systems programs, general applications, accounting applications, utility applications and industry specific software. These areas are broken down into 89 categories. Examples of the categories are data management (66 entries), integrated accounting packages (54 entries), higher level language processors (105 entries), medical packages (30 entries), and construction packages (32 entries). Less obvious categories, for instance, dairy and cattle programs (17 entries) and sports (10 entries) are also indexed.

In spite of the recession, the rapid growth of the software industry is shown by the fact that this edition of the Index contains more than twice as many programs and vendors as the second edition did.

Single copies of the Index are \$10, prepaid (\$14 outside of North America). For more information, contact: Small Systems Group, P.O. Box 5429, Santa Monica, CA 90405, (213)-392-1234.

Conference Session

Computerized Typesetting

"You can typeset your own newspaper, using your computer and an inexpensive matrix printer," says Bill McLaughlin. He'll describe his graphics program during his talk at the 8th Computer Faire, "Typeset Newspaper on Computer."

McLaughlin sees many uses for his production methods, including company ads, newsletters, and club brochures or publications. His presentation will include a technical "how to" explanation, aimed at helping others get started on their own production projects.

High Level Cobol Supports Kanji

The first portable microcomputer Cobol compiler to support the Japanese Industry Standard (JIS) set of Kanji characters has been introduced by Micro Focus.

The High Level compiler processes alphabetical, numeric, and Kanji symbols as it reads the source code. Level II Cobol also supports Katakana characters, the Japanese ideograms for Western words not represented by other existing Japanese symbols.

Programmers using Level II Cobol can reach Japan's office automation market with applications that present Kanji text on screen displays and printouts, and permit users to enter Kanji via the keyboard. Application users will see Kanji characters rather than less familiar alphabet symbols because programmers can now define paragraph names, data names, and literals in Kanji as they write source code.

The portability of Level II Cobol allows programmers to create applications for a broad range of microcomputers, and its compatibility with Cobol applications on large computers permits programmers to bring mainframe application software to desktop computer users. With Level II Cobol, microcomputers can also be used as software development and maintenance stations for mainframe computers running ANSI '74 standard Cobol applications.

Level II Cobol is certified at the High Level, the most sophisticated level of implementation, by the United States government. It is certified with zero errors by the U.S. Federal Compiler Testing Center.

For more information, contact: Micro Focus, Inc., 1860 Embarcadero Rd., #235, Palo Alto, CA 94303, (415)-856-4161.



New DTC Daisy Wheel Printer for Micros

Data Terminals and Communications has introduced a new daisy wheel printer, the DTC 380Z for the personal computer user.

The specification includes a 48,000 character buffer memory for high speed throughput. This allows the computer to fully load up the printer memory within a few seconds, then be used for further applications while the 380Z prints 24 or more pages. Print speed is always dependent on the nature and layout of the text and the 380Z prints at up to 32 characters per second. Interconnecting cables are available to enable the DTC 380Z to work with all major personal computers including Osborne, IBM, Apple, and TRS-80.

Other features are full bidirectional printing, automatic proportional spacing, serial and

parallel interfaces, software compatible with the Diablo 1640/1-650/630, graphic plotting, 50 to 19.2K baud, and a momentary pause capability for paper, printwheel and ribbon changing. The printwheel is available in 12 different print styles and works with standard ribbons. A self-diagnostic test will completely test the unit and the four internal CPU's, while the printer is completely isolated from the computer. Error conditions are indicated by status lights.

Optional extras include forms tractor, and a variety of type fonts and interconnecting cables. The printer costs \$1199.

For more information, contact: Data Terminals and Communications, 590 Division St., Campbell, CA 95008, (408)-378-1112.

Cactus Computer Releases M.O.M.

Cactus Computer Systems' version 2 of their physician-approved Medical Office Management (M.O.M.) software package is now available for national distribution. CCS recently signed a distribution agreement with Monoson Microsystems of Brookline, Massachusetts.

The software package runs under CP/M 2.2 or later, MP/M 1.1, MP/M 2.1 or later and Molecular Computer's n/STAR 2.242 operating systems and costs \$3995. A related dental package is scheduled for release early this year.

For more information, contact: CCS, Inc., 2765 S. Highland Dr., #110, Las Vegas, NV 89109, (702)-369-2044; or Monoson Microsystems, Inc., 21 Station St., P.O. Box 843, Brookline Village, MA 02147, (617)-734-2046.

Conference Session

Medical Practice Management

"A Computer Toolbox for the Resident Physician" is the title of a talk to be presented at the 8th West Coast Computer Faire by Richard Dean Kirkham of David Grant Medical Center, Travis Air Force Base, Vallejo, California.

Kirkham will examine the design of a medical information system from the viewpoint of a physician user.

A physician user of a medical information system would have rapid access to lab and x-ray results, and could reduce paperwork on patient admissions, examinations, and discharges, says Kirkham. Programs could help the physician in designing the therapeutic work-up and regimen, or could review prescribed medications for possible drug interactions.

Kirkham sees the encouragement of individual research as the real bonus of medical computing, as residents become able to create their own databases on topics of individual interest.

All Faire presentations will be published in the *Proceedings of the 8th West Coast Computer Faire*, available at the show in March.

Small Business Computer Guide

Business people with no previous data processing experience and no technical background can learn to select, install and operate a computer by reading "So You Think You Need Your Own Business Computer" by William E. Perry (Wiley, \$14.95, paperback). The book is filled with checklists, worksheets, and step-by-step instructions designed to help small business managers make sound decisions about computer purchasing.

For more information, contact: John Wiley & Sons, Inc., 605 Third Ave., New York, NY 10158, (212)-850-6000.

Datapro Issues Word Processor Honor Roll

Word processing systems marketed by 11 different vendors have earned a place on the Datapro 1982 Honor Roll of Word Processing Systems.

For the second consecutive year, the Compucorp Omega system won first place among standalone, or single-terminal, word processing equipment. First place honors among multi-terminal word processing systems were won by the Phillips 2002 system. Selection to the honor roll

was based on the results of Datapro's nationwide survey of over 24,000 word processing system users. Over 4400 valid responses were returned and tabulated.

Among standalone systems, Dictaphone's Dual Display unit took second place honors, followed by the CPT 8000/8100 system and the Phillips 2000/2001 unit. In the multi-terminal system category, NBI OASYS8 equipment was ranked second, followed by the A.B. Dick

Magna SL in third place. Rounding out Datapro's list were systems marketed by Raytheon, Lanier, Digital Equipment and IBM.

To earn a place on the 1982 Datapro honor roll, a word processing system had to be rated by at least 15 users, earn an overall satisfaction rating of at least 3.2 on a scale of 4.0, and not be rated less than 2.7 in any other category. Equipment evaluations were based on ease of operation, reliability, technical support, responsiveness and effectiveness of service, and other factors. Survey respondents also answered questions about system configuration, applications, and financial acquisition methods.

Datapro has published a complete list of honor roll winners, along with comparative ratings of 58 word processing systems, in a new report, "User Ratings of Word Processing Systems." Copies of the 30-page report are available at \$25 each. For more information, contact: Datapro Research Corp., 1805 Underwood Blvd., Delran, NJ 08075, (800)-257-9406.

FREE!

A Subscription* to the
Silicon Gulch Gazette

Published in the center of the microcomputer industry, the San Francisco Peninsula

Hot News & Techno-Gossip
Rambling Rumor & Fascinating Features
and, of course, all the details of the 8th Computer Faire

(*worth at least every penny you pay for it!)

News of Events

New Product Information

345 Swett Road

Woodside CA 94062

(415) 851-7077

Sorcim Enhances SuperCalc

Sorcim Corporation has released an enhanced version of its CP/M- and MS-DOS-based spreadsheet program, SuperCalc. The enhanced program, called SuperCalc 2, takes advantage of the memory size, processing speed, and color display capabilities found in new 16-bit microcomputer systems.

SuperCalc 2 contains a calendar clock to automate date calculations and time periods, along with conditional summation of modular arithmetic for increased expression of flexibility. A memory extender function allows larger spreadsheets.

Additional features include an execute command allowing repetitive commands to be entered only once to facilitate worksheet linking.

SuperCalc 2 is compatible with Z-80, 8080, 8085, 8086, and 8088 CPUs, and runs under the CP/M 2.2, CP/M-86, MP/M-86, MS-DOS, and IBM PC-DOS operating systems. Minimum system main memory required is 48K bytes for Z-80/8080-based systems or 64K bytes for 8086/8088-based systems.

Users of 16-bit systems having

256K bytes of memory can fill all 16,002 cells of the SuperCalc 2 worksheet—enough space for a ten year projection by month. Also, users with color capabilities will see negative values and diagnostic messages displayed in red, with protected formulas shown in yellow.

SuperCalc 2 features other capabilities including: consolidation, sort facility, rounding function, additional formatting options, and additional print options.

Using the new data exchange standard, SuperCalc 2 can share information between Sorcim SuperWare products, and other CP/M-based applications programs, and vice-versa. A user may transfer financial information from SuperCalc 2 to a letter via SuperWriter, and onto the SuperData-File Manager database, and even add graphics using the Super-Chart program, or perform the same task using another CP/M-based program.

SuperCalc 2 costs \$345. For more information, contact: Sorcim Corp., 2310 Lundy Ave., San Jose, CA 95131, (408)-942-1727.

Enhanced Word Processing on Horizon

A new word processing package that runs with Unix and Unix "look-alike" operating systems was introduced today by Horizon Software Systems, Inc. The software is designed for use in instrumentation, automation, and data processing environments.

Horizon WordProcessing offers full-screen editing, complete format-

ting and document management. Documentation includes a primer, reference card, tutorial, experienced users' reference manual, and on-line "help" tutorials.

All functions needed to edit, format, expand, delete, merge, recall, display, and print a text are included in Horizon. More complex formatting is handled by imbedded standard formatting commands. Users can preview documents before they are printed. Imbedded commands provide extended capabilities including justification, automatic hyphenation, running headers and footers, footnotes, superscripts, subscripts, automatic page numbering, and typesetting.

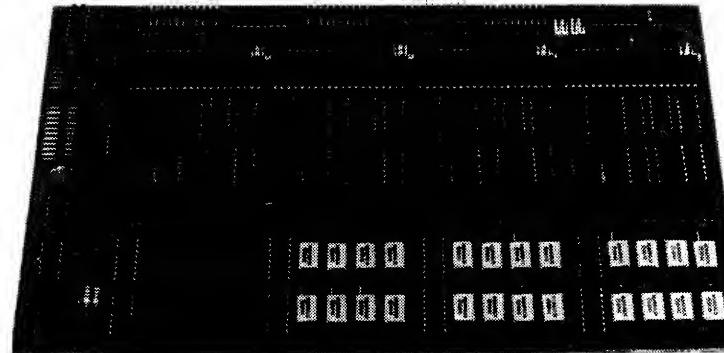
Once the document has been entered and edited, Horizon provides a standard output format which the user may change to meet specific output requirements.

Horizon allows the user to define top, bottom, right and left margins, lines per inch, characters per inch, number of blank lines between paragraphs, page lengths, automatic headers and footers, and page numbering.

In addition, Horizon users may select right, left, centered or two-column page justification. Paragraphs may be numbered and have the first line indented or out-dented. The user controls the way words, phrases, and hyphenated words are split at the right margin. "Hard spaces" and "hard hyphens" may be used to suppress a random break. Decimal points are used to align numerical columnar information.

Horizon runs on any Unix-based operating system with a video display screen terminal and a system printer.

The software is available for \$750. For more information, contact: Horizon Software Systems, Inc., 220 Downey St., San Francisco, CA 94117, (415)-751-1311.



OSM Introduces ZEuS4

OSM Computer Corporation, the manufacturer of ZEuS multiuser, multiprocessor microcomputers, has introduced the ZEuS4, its next generation tiny-footprint multiuser, multiprocessor microcomputer.

The Z80-based ZEuS4 utilizes OSM's multiuser System Executive (MUSE) operating system to support up to four users simultaneously in a totally segregated operating environment fully compatible with CP/M.

The ZEuS4 holds four user-replaceable modules: Winchester disk (up to 19 MB), switching power supply, floppy disk (5-1/4 inch standard; external 8-inch option available), and system/user board module.

The system/user board module contains the two-board master

processor and a separate user card with 10 square inches of circuitry for each user. The user board is factory-configured for up to four physically segregated CPUs, each with 64K RAM, and two serial ports, providing a separate computer for each user. A fully configured system has a total of ten serial ports and two parallel ports.

The basic single-user ZEuS4, with a Z80A microprocessor, 64K RAM, 6.3MB of 5-1/4 inch Winchester disk storage, and 250KB 5-1/4 inch floppy disk drive, lists for \$4595. Two user and four user configurations are available at \$1000 per increment.

For more information, contact: OSM Computer Corp., 2364 Walsh Ave., Santa Clara, CA 95051, (408)-496-6910.

Do You Care or Don't You*

If you do — then consider:

8088 - 128kb - 2 RS232 ports - 2 parallel ports - high resolution bit-mapped display (800x400) - CODEC - 2 high density 5-1/4" floppies (single-sided 600kb each or double-sided 1.2mb each) - tilt and swivel display - detachable keyboard map - soft loaded display character set - soft loaded keyboard map - expandable to 896kb memory - optional 10mb hard disk - 4 expansion slots ...

If you don't — you should consider:

CP/M - MSDOS - UNIX - Basic - COBOL - Fortran - Pascal - C - Forth - SuperCalc - Multi Plan - general ledger - payroll - accounts receivable and payable - inventory - DBASEII - business graphics - CAD - typesetting - communications - point of sale - loan applications - office automation - forms design - data input ...

VICTOR 9000

In its review of the Victor 9000, BYTE magazine said, "... the machine is an excellent microcomputer with an outstanding array of standard features"

The leading German computer magazine called it, "The Computer of the year"

The Professional Machine priced like a personal ...

Unidot is your franchised **Victor 9000** dealer in Santa Clara County with full sales, support, and service. At Booth 1119 at Computer Faire **Unidot** will be showing software for the **Victor 9000** that has never been seen on a microcomputer before — come by and take a look.

But don't wait for your **Victor 9000** ... Call today — **408-745-0505**.

UNIDOT

568 Weddell Dr., Suite 4
Sunnyvale, CA 94086

*More about hardware than software, that is —

Staff Walks Out on "PC Magazine," Starts New Journal

By Deborah Wise, InfoWorld Staff
Las Vegas, NV-Not all the intrigue and excitement at this year's Comdex came from microcomputer software and hardware manufacturers.

On the opening day of the show, CW Communications, publisher of computer-related publications including "InfoWorld" and "Computerworld," announced it had launched a new company to publish a monthly magazine for IBM Personal Computer users called "PC World."

The twist to the story is that "PC World" will be run by former staff members of "PC Magazine," a year-old publication also aimed at IBM Personal Computer users.

A majority of the "PC Magazine" staff resigned two days after that publication came under the control of Ziff-Davis, Inc., a New York City publisher of computer-related publications last month. After they left "PC Magazine," they approached Patrick J. McGovern, chairman of CW Communications, with the idea for "PC World."

David Bunnell, who started "PC Magazine" and was its editor, was named publisher and editor-in-chief of "PC World" and president of "PC World" Communications, a newly formed subsidiary of CW Communications.

The rift with Ziff-Davis occurred because "PC Magazine" staff members felt their rights had been violated when the majority stockholder and founder of the magazine, An-

thon Gold (who is also a founder of Lifeboat Associates), sold his share of the company to Ziff-Davis.

Last year Gold put up about \$200,000 to start Software Communications, the company that published "PC Magazine." According to Bunnell, Gold owned 55% of the venture. Bunnell and other staff members controlled the remaining 45%.

The agreement with Gold, which Bunnell said was in the form of several letters, showed that Bunnell's percentage of the stock would be fully vested over a three-year period. It also said that if during that time a controlling interest in the company was sold, the 45% would revert to Bunnell and his staff immediately.

Over the past four months, "PC Magazine" had been courted by numerous suitors, including CW Communications, Ziff-Davis, CBS Publications, McGraw-Hill Publications and others, Bunnell said. He said all the interested parties, except Ziff-Davis, recognized that Bunnell and his staff controlled 45% of the company. "Ziff-Davis was not our first choice as a buyer."

"Tony Gold promised in writing and orally that he would not conclude a deal with Ziff-Davis until he had (the staff's) approval," Bunnell added.

"PC Magazine" was interested in merging with a larger organization that would help finance its growth, Bunnell said.

"It was a mutually agreed-upon

plan between David and me to find somebody who had the publishing and financial resources to develop a very valuable property," said Gold.

Bunnell maintained that his relationship with Tony Gold had been strained because of lack of financial and moral support. "He called us an artistic success and a commercial failure. We felt he didn't care," said Bunnell.

"The morale has been low recently at 'PC Magazine.' On November 9, when Tony came to the offices, he harassed the staff so much the entire staff walked out," said Cheryl Woodard, former associate publisher at "PC Magazine," who was named "PC World's" associate publisher.

Gold would not comment on his relationship with Bunnell and the "PC Magazine" staff. He did say, however, "I sincerely believe my transaction (with Ziff-Davis) didn't disadvantage David".

Ziff-Davis took control of "PC Magazine" on Friday, November 19. Bunnell found out the following Monday. He said he turned up for work to find executives from Ziff-Davis waiting at the "PC Magazine" offices in San Francisco. They informed Bunnell that Ziff-Davis controlled the publication and offered Bunnell and the staff new employment contracts as a substitute for equity, according to Bunnell. "We didn't feel we had a choice but to negotiate," said Bunnell.

Bunnell then approached CW's

McGovern.

No Comment

"The people at 'PC Magazine' came to me and said the sale (to Ziff-Davis) was a great surprise and violated agreements they had with the majority shareholder (Tony Gold)," said McGovern. "They said they couldn't in good faith work for the new publisher and said they would resign and asked if they could join our organization."

Ziff-Davis would not comment on the developments, said Larry Sporn, executive vice-president.

At the time this story went to press, no legal action had been taken by any of the parties involved in the negotiations.

The first issue of the new magazine "PC World" is scheduled for January 1983. "The first issue is going to be on second-generation software for the IBM Personal Computer," said Andrew Fluegelman, former associate editor of "PC Magazine," who was named editor of "PC World."

Comdex was much the same this year as last for the former staff of "PC Magazine." In 1981, they cruised the aisles trying to sell the idea for a new magazine, called "PC," dedicated to the IBM PC user. This year they were doing the same for "PC World."

Copyright 1982 by Popular Computing, Inc. a subsidiary of CW Communications, Inc., Framingham, MA - Reprinted from InfoWorld.

SGG Want Ads

FOR SALE: Computerized Typesetters. Various brands at very low prices. Use your WP or CPU for a front end — or purchase complete unit. (415) 851-4167.

WANTED: To purchase almost anything electric or electronic — or — any items new or used that can be re-sold. Please call Max Clark (415) 851-4167.

FOR SALE: Computerized Typesetting. Incredible prices for large-needs account. Same for same back up unit. Catalogues, lists, etc. Max Clark (415) 851-4167.

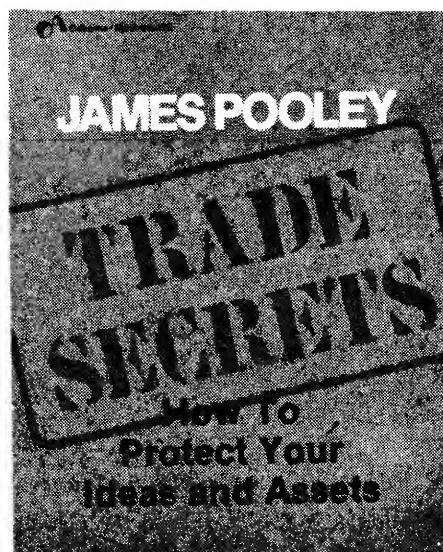
Note: CHILDREN AT THE FAIRE

The Computer Faire is a conference and trade exposition about computing and information processing. It is designed for mature individuals who have a sincere interest in learning about (or learning more about) computing, information management, computers, and "the information society".

These topics are presented at the Faire, presented by adults, and presented for adults... and mature, seriously interested young people and students. Although the Faire includes some element of entertainment and occasional electronic games, the Faire is not appropriate for children nor for immature young people. (Among other things, this is reflected in the single registration fee, for adults.)

Parents and teachers are discouraged from bringing immature individuals to the Faire. To do so is unfair to the other attendees, unfair to the speakers, unfair to the exhibitors, ... and unfair to the children.

Therefore: Children found playing or otherwise causing a disturbance in the convention center may be ejected from the building — just as they would if they were being disruptive in a university classroom, business office, engineering lab, or training seminar (or, for that matter, in a theatre, play, or symphony). The park in front of the Auditorium may be appropriate for children's play; the Faire is not.



Conference Session

Copyright and Software

Many people put a copyright notice on their software but never actually register it with the U.S. Copyright Office, according to Attorney Daniel Remer, whose 8th Faire talk will be "Registering with the U.S. Copyright Office." Copyright registration is easy, inexpensive, and doesn't require a lawyer — so why don't more people do it?

"There are two reasons besides sheer laziness," says Remer. "The first is that some lawyers recommend that software only be registered if and when there is an infringement

Osborne / McGraw-Hill has just published a book on a timely subject, "Trade Secrets," by Attorney James Pooley.

Rapid technological change and employee mobility have contributed to increasing litigation based on theft of trade secrets and customer information. Millions of dollars are spent every year on unfair competition lawsuits involving customer list disputes and employee piracy. Exactly what is "intellectual property" and how can it be guarded?

In "Trade Secrets" Pooley emphasizes preventative techniques. Employers can learn how to protect their intellectual assets using patent, copyright and trade secret methods, as well as how to tighten com-

pany security systems and improve employee relations. Employees can learn how to develop their commercial ideas and, for the more enterprising, how to begin a competing business without being sued.

Should litigation arise, Pooley describes the components of a typical lawsuit, how it begins and proceeds from trial to settlement. He cites various cases and points out tactics and risks for both plaintiff and defendant. Appendices allow the reader to become acquainted with relevant legal forms.

The 145-page paperback costs \$11.95. For more information, contact: Osborne/McGraw-Hill, 630 Bancroft Way, Berkeley, CA 94710, (415)-548-2805.

Privacy and Security

The Privacy and Security Committee of the Computer and Business Equipment Manufacturers Association (CBEMA) has updated its publication, "CBEMA Privacy & Security Bibliography."

The bibliography contains 750 entries on books, reports, and journal articles published in English on computer security, information privacy, and privacy and security aspects of transborder data flows.

For further information on how to obtain a copy of the "CBEMA Privacy & Security Bibliography," contact: Privacy and Security Committee, CBEMA, 311 First St. N.W., Washington, DC 20001, (202)-737-8888.

Introducing... PC WORLD

The indispensable new magazine designed to help you get more of everything out of your IBM (and IBM compatible) personal computer.
New applications, new products, new possibilities for your personal computer ... yours every month in the ultimate magazine for PC users, PC WORLD.

SPECIAL CHARTER SUBSCRIPTION OFFER 3 FREE ISSUES AND 47% OFF NEWSSTAND PRICES

To take advantage of this limited-time Charter offer, just return the coupon to us. We'll enroll you as a Charter Subscriber and send you three free issues of PC WORLD. If you're not completely satisfied with PC WORLD after the

first three issues, simply cancel your subscription, keep the magazines, and we'll cheerfully refund your FULL subscription payment. Remember, this offer provides a special savings from our regular subscription prices:

Regular Prices
12 issues, \$24 (\$2.00/issue)
24 issues, \$39 (\$1.63/issue)

CHARTER PRICES
15 issues, \$24 (\$1.60/issue)
27 issues, \$39 (\$1.44/issue)

This is a limited-time offer. Act now to avoid disappointment.

PC WORLD is published by PC World Communications, Inc.,
555 DeHaro Street, San Francisco, CA 94107 415-861-3861.

**Advertisers and
Retail Magazine
Dealers:**
Call our professional
sales team for
advertising and
dealer information.
415-861-3861.

PC WORLD
Subscription Department, P.O. Box 6700, Bergenfield, N.J. 07621.

I ACCEPT!

Please enroll me as a Charter Subscriber to PC WORLD.

Name _____

Company _____

Address _____

City/State/Zip _____

Send me: 15 issues for \$24
 27 issues for \$39

Payment enclosed
 Bill me

(Rates are for the U.S. and Canada only.)

Visa and Mastercard orders call:
800-247-5470 (800-532-1272 in Iowa).
M0014

8th West Coast Computer Faire Conference Speakers

This is a partial list of Faire speakers. Papers submitted by these speakers have already been accepted. A number of other papers that have been submitted are currently completing the refereeing process.

Use Of Computers In Churches

George M. Aldridge,
Fairfield, CA

Enhancements and Compatibility of the Apple IIe from the Apple II+

Peter Baum, Technical Support,
Apple Computer M/S 22-J,
Cupertino, CA

Preventive Maintenance

James S. Brannick,
Fremont, CA

On Writing Simulators and the Use of Macros

Greg Bryant & Joshua Gordon,
Virtual Microsystems,
Berkeley, CA

Astronomy On Your Home Computer

Eric Burgess, F.R.A.S.,
Santa Rosa, CA

The Role of Computers in Special Education

Ann C. Candler, Assoc. Prof. & Charlotte Horner, Doc. Cand.,
Texas Tech University,
Lubbock, TX

Metacompiler - The Ultimate Forth Tool

John J. Cassady,
Forth Age,
Oakland, CA

Evaluating Educational Software

Glee Cathcart, Computer Lab Coordinator,
Morrill Middle School,
San Jose, CA

Simulation: See For Yourself

Edward Cherlin, District Sales Manager,
InfoSoft Computers,
Palo Alto, CA

Using a PAL to Emulate the Internal State Counter of the MMI 'S516 LSI Multiplier/Divider

Vincent J. Coli, Applications Engineer,
Monolithic Memories,
Sunnyvale, CA

Your Role in Computer Book Publishing

Raymond A. Collins, Editorial Vice President,
TAB Books,
Blue Ridge Summit, PA

Microprocessor Based Aids for Employment that Handicapped Persons Need Now

Susan H. Phillips, Dir. of Dev. & Sharon Connor CEDP Prog. Mgr.,
Sensory Aids Foundation,
Palo Alto, CA

Role of Software Requirements

Russell A. Cook,
System Analysis Engineer,
San Jose, CA

On Starting A Computer Camp

Thomas P. Copley, Ph.D. Exec. Dir.,
Yellow Springs Computer Camp,
Yellow Springs, OH

What Can Computers Do For The Visually Handicapped?

Virginia Sowell, Assoc. Prof. & Vivian I. Correra, Lecturer,
Texas Tech University/College of Education,
Lubbock, TX

Microcomputer Applications for Individuals with Fine Motor Impairments

Dennis Dahlquist, M.S. & Ann Preszler, M.A.,
Assistive Device Center,
Sacramento, CA

Certain Legal Aspects of the Computer Industry

Jay Dratler, Jr.,
Fenwick, Stone, Davis & West,
Palo Alto, CA

32-Bit Microcomputers & Microprocessors

Gene A. Finkler,
Cupertino, CA

Who's Playing These Games Anyway?

Sarah Fisher,
Graduate Group in Science & Math Education,
Berkeley, CA

Choosing and Designing Multiuser Systems

Lew Gaiter III, Software Engineer,
OSM Computer Corp.,
Santa Clara, CA

Business Ethics & Small Computers

Bruce Goldstein, President,
Executive Consultants,
Burlingame, CA

Computer Assisted Learning Language (CALL) An Authoring Language for Teaching and Industrial Training

Dr. H. L. Gray, Dean,
Dedman College,
Dallas, TX
Alan C. Elliott, M.A.S.,
Dallas, TX

Business Planning for Exporting Computer Software Under the U.S. Export Regulations

Fred M. Greguras & Jacqueline A. Daunt,
Fenwick, Stone, Davis & West,
Palo Alto, CA

Programming the Apple IIe - The Familiar New Computer

Bill Grimm,
Cupertino, CA

Financing Hardware and Software Development Through R & D Partnerships

Michael L. Harrison,
Harrison, Hearn & Berthold,
San Jose, CA

Improving Your Memory with 'S700-Family MOS Drivers

Chuck Hastings & Suneel Rajpal,
Monolithic Memories,
Sunnyvale, CA

Shading and 3D with Hidden Surface: Techniques That You Can Use On Any Home Computer

Mike Higgins,
The Computer Entomologist,
Duncans Mills, CA

Introduction to Input/Output Programming with your Atari Computer

Winfried A. Hofacker,
Pomona, CA

MDCSTAT: Statistics The Easy Way

Luc M. Hondeghem, M.D., Ph.D.,
Professor of Pharmacology,
San Francisco, CA

Computer Usage with the Severely/Multi Handicapped

Thomas R. Irons, Ed.D. & Donna Irons, Ed.D.,
Texas Tech University,
Lubbock, TX

A Computerized Message System for the Rehabilitation Community

David L. Jaffe,
Veterans Administration Medical Center,
Palo Alto, CA

Software Quality Assurance: Application for Personal and Microcomputer Software Development

Joe Jarzombek,
USAF Satellite Control Facility, Systems Integration,
Sunnyvale AFS, CA

Computers for Exceptional Children: When is the Wedding?

Dee LaMont Johnson, Jerry Willis & Cleborne D. Maddux,
Texas Tech University,
Lubbock, TX

Systems Impact of 32-Bit Microprocessors

Thomas L. Johnson, Systems Engineer,
Motorola, Inc.,
San Jose, CA

5-1/4" Diskette Format Standards

Eric M. Kadison, Product Planning & Development VP,
Media Systems Technology,
Irvine, CA

A Computer Toolbox for the Resident Physician

Richard Dean Kirkham,
Travis AFB, CA

Financing the High-Technology Company with an R & D Limited Partnership

Daniel L. Larson,
R & D Funding Corp.,
Menlo Park, CA

Learning in the Game Grid: Advancing Computer Literacy Instruction

Jeff Levinsky, Director of Research,
Interactive Sciences, Inc.,
Palo Alto, CA

"Solo/NET/works - A Microcomputer Network Learning Environment"

Blaise W. Liffick, Assistant Professor,
Department of Mathematics and Computer Science,
Millersville, PA

Learning Music At The Computer

Wolfgang Kuhn,
Stanford, CA
Paul Lorton, Jr.,
San Francisco, CA

The Future of Microcomputing and the Handicap of Learning Disabilities

Cleborne D. Maddux & Dee LaMont Johnson, Assoc. Profs.,
College of Education/Texas Tech University,
Lubbock, TX

National Standards for Amateur Packet Radio Networks

H.S. Magnuski, KA6M,
Menlo Park, CA

Using Window Graphics in BASIC on Olivetti's M20

Richard Mateosian,
Berkeley, CA

Instruction Modification Techniques on the 6502

W. D. Maurer, Professor,
Dept. of Electrical Engineering & Computer Science,
Washington, DC

TypeSet Newspaper on Computer

Bill Mc Laughlin,
San Luis Rey, CA

Strategic Planning is Necessary for Starting and Operating Your Business

Sam Mendelow, President,
QC Resource Group,
Chatsworth, CA

Micros to Mini

Leonard T. Meuer & Marilyn E. Clinger,
Travis Unified School District,
Travis AFB, CA

RATFOR: Pascal-Like Syntax for FORTRAN

Alan R. Miller,
Professor of Metallurgy,
Socorro, NM

Buying Business Programs for Your Computer

June B. Moore, J.D.,
San Anselmo, CA

LISP - A Short Introduction

Richard A. Munoz, Project Manager,
Friends of LISP/Logo & Kids,
San Francisco, CA

8th West Coast Computer Faire Conference Speakers

An Experimental Voice Input Computer Game

Allen Munro & Harry Abramowski,
Behavioral Technology Laboratories,
Redondo Beach, CA

Investing in Public Technology Companies

J. Michael Murphy, C.F.A., President,
Pacific Technology Advisers,
San Francisco, CA

What to Look for (and Avoid) in a Word Processor

Arthur Naiman,
Oakland, CA

A Microcomputer-Videotape Recorder Interface Program for Special Education Inservice Training

Jacqueline K. Pederson & Ann C. Candler,
College of Education, Texas Tech University,
Lubbock, TX

Beyond Authoring Systems: A Program Generator for Education

Ted Perry, Computer Tech. Prgm. Spec. & Barry Cole, Comp. Spec.,
Sacramento City School District,
Sacramento, CA

Computer Vision and Image Recognition

Dr. Henry Pfister,
Los Angeles, CA

Young Children Use Computer Graphics

Ann M. Piestrup, Ph.D.,
Chairman, The Learning Company,
Portola Vly, CA

Data Bases for Business

David M. Pittle,
Smart Management Systems,
San Rafael, CA

Keeping Your Feet on the Ground: Believable Video Animation

Tom Pittman, Consultant,
San Jose, CA

The Pascal Prime Project

Jerry Pournelle,
Byte Magazine,
Hancock, NH

Word Processing, Some Questions to Ask

Larry Press, President,
Small Systems Group,
Santa Monica, CA

How to Make Money with a Computer

Robert K. Ramers, Pres., Computer Alternatives,
Larkspur, CA

The Next Generation: Integrated Program Generators, Data Base Managers, and Business Software on Small Business Computers

Robert K. Ramers, President,
Computer Alternatives,
San Rafael, CA

Forth and numeric co-processors: an extensible way to floating point computation

Dana Redington,
Sleep Research Center, Stanford University,
Stanford, CA

Registering with the US Copyright Office

Daniel Remer, Esq.,
Remer, Remer & Dunaway,
Mountain View, CA

Scoring Music Directly from Keyboard Playing

Kentyn Reynolds,
Santa Fe, NM

Evolution of the Amateur Packet Radio Network

Paul L. Rinaldo W4RI,
Amateur Radio Research & Devel.Corp.(AMRAD),
McLean, VA

SURVIVING IN THE MARKET JUNGLE: Your Survival Tools are Words on Paper

Nicholas Rosa,
Nicholas Rosa Assoc.,
Campbell, CA
Sharon Rosa Wood,
Valley Technical Writing Service,
Los Gatos, CA

Raster Graphics

Maria Runyon,
Applications Engineer,
San Jose, CA

Brainwaves on a Budget: A Home EEG Data Analysis System

Robert E. Schaffer,
Houston, TX

B-I-T-S: Life Sciences Literature Files on Floppy Disks

Louise Schultz, Systems Development Director,
BioSciences Information Service,
Philadelphia, PA

Tort Liability of Computer Vendors

Michael D. Scott,
Manhattan Beach, CA

Corporate Attitudes Toward The Microcomputer

P. Michael Seashols, VP of Marketing,
Dynabyte Business Computers,
Milpitas, CA

Evaluating Computer Speech Devices For Your Application

Carol A. Simpson,
Psycho-Linguistic Research Associates,
Menlo Park, CA

Using the Microcomputer for Teaching Pre-Math Concepts to Young Preschoolers

Mary Tom Riley, Ed.D., Dale Smith & Vincent L. Taylor,
Texas Tech University/Institute for Child & Family Services,
Lubbock, TX

FORTH-83 DO-Loops

Robert L. Smith,
FORTH Standards Team,
Mtn View, CA

Report on FORTH-83

Robert L. Smith,
FORTH Standards Team,
Mountain View, CA

Developing Special-Purpose Languages

Sheldon D. Softky,
Menlo Park, CA

Algebraic Expression Evaluation in FORTH

Michael Stolowitz,
Danville, CA

Computer Prep: Considerations for a Pre-College Computer Science Curriculum

Monty Swiryn,
San Jose, CA

Computer Tutor Project: Computer Literacy in the School

Joan Targ, President,
Interactive Sciences,
Palo Alto, CA

Get More from Visicalc and Supercalc

Stanley R. Trost,
Walnut Creek, CA

Goodbye, Gutenberg? Books or Bits?

Elizabeth S. Wall,
Media Consultant,
Nokomis, FL

Quill Pens Have No Downtime - Six Ways to Reduce Employee Resistance to Computers

Dr. Sanford B. Weinberg, Chairman,
Saint Joseph University/Dept. of Admin. Sciences,
Philadelphia, PA

An Introduction to Modula-2 for Pascal Programmers

Lee Jacobson & Bebo White,
San Francisco, CA

Copyright, Software and Piracy

Kenneth S. Widelitz,
Kenneth Leventhal & Co,
Los Angeles, CA

Using VisiCalc for Real Estate Financial Analysis

Kenneth S. Widelitz,
Kenneth Leventhal & Co,
Los Angeles, CA

QWERTY: The worst possible keyboard (except for all the others)

Dr. Douglas H. Williams, Ph.D.,
Psycho-Linguistic Research Associates,
Menlo Park, CA

Digital Image Processing with a Personal Computer

Edwin M. Winter,
Donna M. Winter,
Technical Research Associates, Inc.,
Camarillo, CA



Now test both 5 1/4" and 8" Floppies, and many 5 1/4" and 8" Winchesters with one lightweight, portable exerciser. Used by Tandon, Seagate, Shugart and other leading manufacturers, the Model 103D is ideal for incoming inspection, repair depot, and field service use.



Quality Disk Drive Exercisers Since 1974
8010 Highway 9 Ben Lomond, CA 95005
(408) 336-5048

The 8th West Coast Computer Faire

San Francisco

March 18-20, 1983

(exhibit space completely sold out, two months before the show)

3M/Data Recording Products Division
800-Software, Inc.
A.I.D.S. Computer Center Stores
A.P.P.L.E.
Abacus Software
Accent Software, Inc.
Access Matrix Corporation
Acorn Systems Inc.
Addcom Electronics Inc.
Addison-Wesley Publishing Co., Inc.
Addmaster Corporation
Advanced Communications International
Advanced Computer Controls
Advanced Computer Products
Advanced Logic Systems
Adventure International
Affordable Software Inc.
Agile Company
Algoram Computer Products, Inc.
The Alien Group
Allen Gelder Software
Allenbach Industries, Inc.
Almaden Systems, Inc.
Alpha Computing Supply, Inc.
Amdek Corporation
American Ink Products Company
Anaheim Publishing Company
Analog Computing Magazine
Analytical Engines, Inc.
Anchor Pad of Northern California
Antic Publishing Co.
Anvil Cases, Inc.
Appologue
Apparat, Inc.
Apple Computer
Applegate Computer Enterprises
Applied Innovations
Arcade Plus, Inc.
Arcadian Newsletter for Arcade
Arfon Microelectronics, Inc.
Arnds & Arnds Micro Management Systems
Arrow Computer Supply
Arrow Electronics, Inc.
Artec Electronics, Inc.
Artra, Inc.
Artworx Software Company, Inc.
Ashton-Tate
Atari, Inc.
Atech-Tokyo Electronics
Athena Computer & Electronic Systems
Ault Associates
Avalon Hill Microcomputer Games
Avant-Garde Creations
Axlon, Inc.
BASC
Bausch & Lomb
Berkeley Microcomputer
Berzurk Systems
BIT 3 Computer Corporation
Broderbund Software, Inc.
BudgeCo
Business Computer Systems (magazine)
Buss: Independent Heath/Zenith Newsletter
Byte Publications
c-systems
Westape
Calsoft
Carousel Microtools, Inc.
The Casemaker
Casheab
Casio
Catherine Kent Associates
Caxton Software Ltd
CBS Educational & Professional Publishing
Checks To-Go
Codys Books
Colby Computer
Commercial Mailing Accessories, Inc.
Commodore Computer Center
Commsoft
Comp-U-Card of America, Inc.
Compac Micro Electronics
Component Sales, Inc.

Compupro division Godbout Electronics
Compute! Publications
Computech Systems
Computer Alternatives
Computer Camp, Inc.
Computer Case Co.
Computer Center, Inc.
Computer Connection
Computer Discount of America
Computer Discount Products
Computer Furniture & Accessories, Inc.
Computer Gaming World
Computer Giftware
Computer Science Press, Inc.
Computer Shack
Computer Shopper
Computer Technology Innovations
Computers For You
Computing!
Concord Computer Products
Condor Computer Corporation
Continental Software Co.
Controlled Data Recording Systems, Inc.
Corona Data Systems
Cosmopolitan Electronics Corp (CEC)
Creative Computers
Creative Computing
Creative Software
CTA/Rocky Mtn Data
Cydat Incorporated
Cypher
Dasoft Design Systems, Inc.
Data Processing Recruiters
Data-Asette
DATA Theory/Logic FACTS
Datamation Magazine
Datamost
Datasoft, Inc.
Davell Custom Software
Davidge Corporation
Davong Systems, Inc.
DG Electronic Developments Co., Inc.
Dialog Information Services, Inc.
Digit Magazine for Young People
Digital Deli Computer Store
Digital Deli Computer Store Workshops
Digital Research, Inc.
dilithium Press
DisCopy Labs
Discovery Games
Diskus
Dokay Computer Products Inc.
Doss Industries
Double-Gold Software
Douglas Electronics
Dysan Corporation
E/Z Associates
Easi APL Systems
East Side Software Co.
Edu-Ware Services, Inc.
Educational Software Inc.
Elcom Systems Peripherals, Inc.
Electro Mavin
Electronic Systems Furniture Co.
Encyclopaedia Britannica
Evryware
Exatron
Ferox Microsystems Inc.
Floppy Disk Services, Inc.
FMJ, Inc.
Forth Interest Group
Fox 20
Freedom Won, Inc.
Professional Microsystems Div Fujitsu Inc.
Funware, Inc.
Gallaway Enterprises, Inc. (GEI)
George Risk Industries, Inc.
Gifford Computer Systems
Glen S. Mason Computer Systems & Software Sales
Gold Software (Douthett Entrp., Inc.)
H & E Computronics, Inc.
H&R Enterprise
H.A.L. Labs
Hayden Book Co.
Heath/Zenith
Heigen Corp.
Hercules Computer Technology
Downco-Technicom
Howard W. Sams & Co., Inc.
Huntington Computing
HW Electronics
IBM

Imprint Software
Individual Software, Inc.
Industrial Modules, Inc.
INET Corporation
InfoWorld
Elcomp - Hofacker International
Inner Vision
Innovative Computer Products
Innovative Concepts, Inc.
Insoft
Intelligent Statements, Inc.
Interactive Structures Inc.
Interactive Tele-Marketing
Interface Age Magazine
Interfirm Systems Corp
International Computer Center
International North Star Users Assn.
Island Graphics
Jade Computer Products
Japan Microcomputer Club
JDR Microdevices, Inc.
JMM Enterprises, Inc.
John Bell Engineering, Inc.
John Wiley & Sons, Inc.
JRT Systems
Kaypro
Kensington Microware Ltd.
Kern Publications
Kraft Systems Company
Krell Software
Kres Engineering
Lacerite Microcomputer Corporation
Lexisoft
Lifetree Software Inc.
Lightning Software, Inc.
Little, Brown and Company
Logitech, Inc.
Look Twice
Magnolia Microsystems, Inc.
Management Information Source, Inc.
Marinchip Systems Ltd.
Matchless Systems
Matco Data Products
Maxell
McGraw-Hill Book Company
Melbourne House Software, Inc.
Micro Data Tek
Micro Discovery Magazine
Micro Focus
Micro Ink, Inc. & The Computerist
Micro Lab
Micro Potentials
Micro Projects Engineering, Inc.
Micro-Ap, Inc.
Micro-Sci, Div. of S.C.I.
Microbits
Microcomputer Accessories, Inc.
Microcomputer Consultants
United Peripherals
Microcomputer Technology, Inc.
Microware Exceltek
Microwest Distributing Inc.
Minnesota Western
Mission Computer Corporation
Mitsuba Corporation
Monarchy Engineering, Inc.
Morningstar
Morrow Designs
Mountain View Press, Inc.
Mouse Systems Corporation
Mouser Electronics
MPI
Multitech Electronics, Inc.
Network, Inc.
Newport Controls
Nexa Corp
Norell Data Systems Corp.
Nuts & Volts Magazine
Oasis Systems
Operand, Inc.
Optimized Systems Software Inc.
Opus Media/Computer Resources
Orange Micro, Inc.
Orchid Technology
Osborne Computer Corporation
OSM Computer Corp.
Otronra
Frobco
Panamax Line Conditioning
Parsec Research
Passport Designs, Inc.
Patrick & Co.

more →

Conference Session

Tort Liability and Computer Vendors

While a breach of contract action is still the most frequent legal move taken against a vendor who doesn't deliver what was promised, there is a growing trend toward tort claims, because they can avoid limitations and disclaimers found in a vendor's form contract, according to Attorney Michael Scott.

In his 8th Faire talk, "Tort Liability of Computer Vendors," Scott, publisher of the "Computer/Law Journal," "The Scott Report," and "Software Protection," will discuss the applicability of tort doctrines to computer disputes.

"Tortious conduct can come in many guises. However, it can be divided into two clearly defined categories - negligent conduct and intentional conduct," says Scott. He will discuss several tort theories in each category and how they can be applied to the sale or leasing of computer hardware and software.

(8th Faire Exhibitor List Cont.)

PC Magazine
PC World
Peachtree Software International
Penguin Software
People's Computer Company
Persyst (Personal Systems Tech.)
Phase One Systems, Inc.
Plantronics/Frederick Electronics
Portable Computer Magazine
Practical Peripherals, Inc.
Prasek Computer Systems, Inc.
Prentice Hall/R.J. Brady
Program Design, Inc.
Pterodactyl Software
The Purchasing Agent
Quadram Corporation
Quality Software
Quentin Research, Inc.
Quest Electronics
Quiet Designs, Inc.
R&R Software
Radio Shack
RC Data, Inc.
RCA Micro Computer Products
RCE Ralston-Clearwaters Electronics
Reston Publishing Co.
RKS Industries
Robotics Age Magazine
Rocky Mountain Software Systems
Romox, Inc.
Rothenberg Information Systems, Inc.
SAFT America, Inc.
Sam Clar Office Furniture, Inc.
San Francisco Apple Core
SBT Corp
Scitor Corporation
Select Information Systems, Inc.
Selectone Computer Products Division
SemiDisk Systems
Serial Data Systems
Sierra On-Line Systems, Inc.
Sigma Designs Inc.
Sirius Software, Inc.
Smart Management Systems
Soft/Systems
Softalk Publishing Inc.
SoftCorp International, Inc.
Softsel Computer Products, Inc.
Softsync, Inc.
Software Options Inc.
Software Productions
Software Review Magazine
Software Toolworks
Software Training Company
The Software Works, Inc.
System Software Services
Sorcim Corporation
Sorrento Valley Associates, Inc.
Source Edp
Southern California Research Group

Conference Session

Financing with R&D Partnerships

Research and Development partnerships, an increasingly popular form of financing for new businesses and projects in ongoing concerns, will be discussed by Attorney Michael Harrison in "Financing Hardware and Software Development Through R&D Partnerships."

"The popularity of R&D partnerships stems from the several tax benefits which are available to investors including current expensing of costs associated with research and development, treatment of royalty income on a capital gains basis, and the possibility of investment tax credits on R&D expenses," he says.

Harrison, a partner in Harrison, Hearn and Berthold, San Jose, California, will survey the benefits of R&D financing for software and hardware projects. Tax considerations and the security law framework will be outlined for this attractive investment vehicle.

Specific Solutions
SpreadTech, Inc.
SSM Microcomputer Products Inc.
Stacey's Bookstores
Stahler Company
Stanford Bookstore, Med/Tech. Div.
Star Business Systems
Starflower Technology, Inc.
State of the Art Computers
Stoneware Incorporated
Strategic Simulations Inc.
Strawberry Tree Computers
Structured Design, Inc.
Structured Systems Group, Inc.
Sweet Micro Systems
Sybex
Synapse Software
Syntauri
Systemics
Tab Books, Inc.
Tall Tree Systems
Tape-Tronics
Texas Instruments, Inc.
TexaSoft
TG Products
Tiger Electronic Toys, Inc.
Time Arts, Inc.
TNW Corporation
Totl Software, Inc.
Trionyx Electronic Inc.
TriStar Business Systems, Inc.
U.S. Micro Sales
Unidot, Inc.
User's Guide to CP/M
USI International Computer Products
Vector Electronic Co., Inc.
Vectrix Corporation
Veritas Technology, Inc.
Victory Computer Systems, Inc.
Videx Inc.
Visionary Electronics Inc.
Wabash DataTech, Inc.
Wadsworth Electronic Publishing Co.
Wayne Green Inc.
Webster, McEvoy & Assoc.
Wesper Microsystems
West Coast Business Products, Inc.
Blue Book for the Apple Computer
WEE (Modem Division)
William Kaufmann, Inc.
Win/Mill Research Inc.
Wood & Clay Company
Woolf Software Systems
Word Associates
Wordtech Systems
Workman & Associates
Worldwide Software Publishers
Xcomp
Xebec Systems
Total listed exhibitors: 386

Conference Session

Learning Music at the Computer

"The future for learning music at the computer is bright indeed. At some point in the future, one could expect people to buy a microcomputer just to learn to play the piano even as many now buy a microcomputer just to play Pac Man or Visicalc. Certainly it is now possible to gain a certain level of musical training by adding a few pieces of equipment to an existing home computer," say music educators Wolfgang Kuhn and Paul Lorton.

In their 8th Faire talk, "Learning Music at the Computer," Kuhn and Lorton, of Stanford University and the University of San Francisco respectively, will discuss current trends in computer music education. They will also comment on whether quality music education is available through microcomputers, using today's hardware and software.

"The most important caution is that the fact that a microcomputer

can make musical sound of a form and can produce graphic displays which resemble musical notation does not mean that they are effective devices with which to learn music. Seeing primitive notation and listening to single voice square wave tunes will not train young musicians," warn the educators.

COMPON Fall '83: Computer Power

COMPON Fall '83, "Delivering Computer Power to End Users," sponsored by the IEEE Computer Society, will be held at the Marriott Crystal Gateway Hotel, 1700 Jefferson Davis Highway, Arlington, Virginia, September 26-30, 1983.

For more information, contact: COMPON Fall '83, P.O. Box 639, Silver Spring, MD 20901, (301)-589-8142.

Conference Session

Micros and the Learning Disabled

Children with learning disabilities may have a new chance in mainstream education now through the use of microcomputers. If "active", rather than "passive", uses of microcomputers with learning disabled (LD) children are developed, the great potential of microcomputers may be realized, say some special educators.

Cleborne Maddux, Ph.D., and Dee LaMont Johnson, Ph.D., both of Texas Tech University, will define "The Future of Microcomputing and the Handicap of Learning Disabilities" at the 8th Faire.

Involving LD children actively as programmers using the Logo language, as writers using word processing, and in simulation programs, can lead them through a series of situations which they would not normally experience, explain Maddux and Johnson.

"It is important for the involvement to be 'active' in order for it to make a difference in the way children think," claim the authors. "The microcomputer should be more than an expensive secretary."

Conference Session

Computer Vision and Image Recognition

Computer vision and image recognition has always been a problem in robotics and machine intelligences research. But Henry Pfister says it is now possible to assemble a computer imaging system with high computational capability for under \$4000.

In his 8th Faire talk, "Computer Vision and Image Recognition," the University of Southern California, Los Angeles, faculty member will discuss the system. It is comprised of an Apple II, a DS-65 video camera digitizer, and an Acorn 68000 processor.

Far-Flung SGG Subscribers

Recently, S. Laaboudi of Casablanca, Morocco requested a subscription to our Silicon Gulch Gazette. We're happy to have Mr. Laaboudi as one of our readers and hope the subscription will be "the beginning of a beautiful friendship."

The Gazette, published six times a year, reaches over 100,000 readers throughout the world. For a free subscription, send your name and address to: Computer Faire, 345 Swett Rd., Woodside, CA 94062.

ENLIGHTEN!
ELUCIDATE!
EDUCATE!

Give a talk on your favorite computing topic at the First IBM PC Faire, August 26-28, 1983, in San Francisco. You can even create and chair your own conference session.

All accepted papers will appear in the *Conference Proceedings of the First IBM PC Faire*, available at the show.

The deadline for abstracts and camera-ready papers is June 14, 1983.

Call or write for a Speaker's Kit and more information today: Computer Faire, 345 Swett Road, Woodside CA 94062, (415)-851-7077.

Gossip...

(continued from page 10)

the mountain of explosively developing 16-bit software that is becoming available. And, under G&G's MP/M-8/16 operating system on the CompuPro box, you can virtually ignore the fact that you are running software designed for two different CPU's. The OS sorts out whether you have called an 8-bit version of a word processor that is to be run on the 8085, or a 16-bit spreadsheet like SuperCalc (which is super), to be run on the 8088 directly addressing the entire memory space.

COMPUPRO HARDFACTS

These Godbout Godzillas are unimpressive from the outside of their desktop mountings - just your ho-hum black box with power switch and reset button. But, their innards are exquisite. They're sorta like a Caterpillar tractor - beautiful only to the Cat connoisseur who worships quality and reliability.

The power supply is so potent that it can even overcome the frail power offered that we have, out here in the redwood boondocks of the San Francisco peninsula. (Two neighbors turn on their electric ovens and the power drops to 114v.) Even with the box loaded full of power-hungry boards, the system doesn't whimper.

The PC boards are a particular delight. The traces are well-designed and solid; the soldering is neat and clean; the sockets are clearly labeled. Why, they even have card-pullers on 'em (such a joy, after tugging at the antique boards in our antique old computer). O' course, you don't need to pull the boards for repair; just for system modification.

We should also mention the holy mnemonic, "CSC." Godbout offers you the option of getting regular boards, or CSC boards - Certified System Components. Godbout will tell you that such CSC boards are burned in for a week or more - which is true. What he doesn't mention is that they also use faster chips. Thus, if you spend the nominal extra loot to get CSC boards, not only do you lessen an encounter with "infant mortality," you also get a faster system.

Furthermore, if you get the system through G&G, they cook it for another week or two - giving you a hi-temp 200 hours of burn-in.

All in all, we find the CompuPro hardware plus MP/M-8/16 operating system to be most impressive. So much so that we paid significant loot to get a pair of 'em.

Note: CompuPro gear is definitely not for the bottom-of-the-line economy shopper. If you want to spend little money, but probably spend lots of time on malfunctioning gear, get something else. If you want something that - for sure - is likely to run and run and run, and let you spend your time on something other than repairs . . . we recommend the CompuPro line. Remember, "cheap" is not the same as "inexpensive."

SORCIM'S SUPERCALC IS

Of course, a reliable computer is nice, and a robust operating system is a pleasure, but applications-oriented software is what makes a computer

Conference Session

Window Graphics on Olivetti's M20

Management of windows may appear difficult to programmers who have not worked with them before. In his 8th Faire talk, "Using Window Graphics in Basic on Olivetti's M20," Richard Mateosian will attempt to show the ease with which window management can be accomplished.

Mateosian will discuss the Olivetti M20 Personal Computer which uses a version of Microsoft Basic 5.2 that

allows the M20's 256x512-pixel bit-mapped display to be divided into up to 16 independent rectangular windows. Mateosian will share examples from his own desk assistance program which is written in Basic on the M20. The program uses separate windows for simultaneous time, calendar and appointment displays, a desk calculator, telephone directory, and a variety of utility functions.

Company on Go Supports Faire

The Sabaki Go Company of Carlisle, Pennsylvania recently sent us a letter, full of good wishes for the 8th West Coast Computer Faire. The promoters of the oriental board game wrote that they "want to express support for this important event. Its success gives momentum to innovation and entrepreneurial opportunity."



Find out why membership in the IEEE Computer Society is one of the best investments you'll ever make

Complete the application on the next page and mail with correct remittance to:
IEEE Computer Society, 10662 Los Vaqueros Circle, Los Alamitos, CA 90720

(continued on page 22)

Data Broadcasting Introduced by TCP Business Systems

A Toronto company has combined broadcasting and computer technologies to open up a new field of computer communications. TCP Business Systems debuted this new technique, called data broadcasting, at the Canadian Computer Show held in Toronto last November.

With data broadcasting, data can be broadcast from one computer to any number of others using a standard television signal. The key to data broadcasting is Alpha Micro's

Video Link, a controller board that converts data into a standard TV video signal.

Alpha Micro is a California manufacturer of multi-user mini and micro business computers. These systems retail in Canada for between \$12,000 and \$65,000 (\$9,000 to \$50,000 U.S.). Over a year ago, Alpha Micro introduced the Video Link to users through its 200 dealers in 32 countries. The Video Link allows users to connect video cassette re-

corders (VCR's) to their Alpha Micro computers. With a capacity of over 100 megabytes per video tape, the VCR's provide a low cost, back-up system for Winchester disks.

But it was Toronto-based TCP Business Systems, that extended the application of the Video Link to include data communications. TCP, also known as The Computer Place, is a division of Azcar Technologies Inc.

TCP determined that the video

signal created by Alpha Micro's Video Link is identical to the signal television broadcasters use and that with the Video Link it was possible to transmit data in the form of a video signal from one computer to numerous points. Existing broadcast facilities, including cable, microwave, and satellite can be used to broadcast data.

During the Canadian Computer Show, TCP presented a special demonstration of data broadcasting to introduce the concept to computer professionals.

TCP booked time with Telesat Canada on one of the occasional use video channels on the Anik B satellite. An Alpha Micro AM-1000 computer was installed and waiting for instructions in Telesat's facilities at Allen Park, just south of Owen Sound. It received its command at 1:40 p.m. on November 17, when TCP President Murray Desnoyer gave the go ahead from a remote terminal in TCP's booth.

Immediately, the AM-1000 in Allen Park sent a dozen files containing text and data up to the Anik B satellite. TCP could have broadcast any type of information at all, including software programs, graphics, or daily stock quotations. From the "bird," 38,000 kilometers out in space, the transmission was broadcast back to earth. TCP received the signal at a three meter dish in the parking lot outside the Canadian Computer Show. Standard television cable brought the text and data to the booth where it completed its journey at a second AM-1000 computer.

Satellite transmissions can be received equally well anywhere within the satellite's receive pattern, or footprint. Anik B's footprint covers all of Canada, and a bit of the northern U.S. TCP's transmission could have been received clearly in Resolute, Frobisher Bay, St. Johns, New York, Minneapolis, Vancouver, and Dawson, as well as any point between those sites.

Most conventional methods of data transmission can be received at only one point at one time. The rate at which the information may be sent and received is faster by video (whether satellite or cable) than by existing methods. Additionally, high speed transmissions are available only between major centers, and tend to be expensive (several thousand dollars per month per center).

Satellite signals can be received in both metropolitan and remote areas. For about \$15,000 in the U.S. the business user can purchase a 10 Megabyte multi-user Alpha Micro computer system, with Video Link, plus all of the equipment required to receive a satellite signal. There are no additional line charges.

For more information, contact: TCP Business Systems, 233 Carlaw Ave., Toronto, Ontario. M4M 3E9, (416)-465-2493.

Faire Smoking

By city ordinance, smoking is permitted only in the entrance lobby of the Civic Auditorium. It is explicitly prohibited in the conference halls, perhaps due to limited ventilation.

MAIL TO: IEEE COMPUTER SOCIETY, 10662 LOS VAQUEROS CIRCLE, LOS ALAMITOS, CA 90720 USA



Membership Application

Check here for your free copy of
 Microprocessors and Microcomputers or
 Selected Reprints in Software

MAILING ADDRESS

First name _____ Middle initial(s) _____ Last name _____

Street address _____

City _____ State/Country _____ Zip _____

Full signature _____ Date _____

OCCUPATION

Title or position _____

Firm name _____

Firm address _____

City _____ State/Country _____ Zip _____

IEEE membership no. or affiliate society membership no. (If applicable) _____ Grade _____

Date of birth _____ Male Female

EDUCATION (highest level completed)

Name of educational institution _____

Course _____ Degree received _____ Date _____

ENDORSEMENT (Name one individual, preferably an IEEE member, who knows you professionally.)

Name (print in full) _____

Street address _____

City _____ State/Country _____ Zip _____

FOR OFFICE USE ONLY

Member Number	St/Ctry	Zip Code/City	Reg	Coun	Sec
3	10 11	14	20	22	24
Subsec	C/S	Country	A/C	BPA Code	Grade
26 28 29	32 33	39 40	42		Birthday
Elec Date	Brochure	Year	Disp	Event	
72 75	1	4 6	7 9	S G G	1 - 8 3
					15

Schedule of fees

Important: Pay the FULL-YEAR rate if your application is postmarked between September 1, 1982 and February 28, 1983. Pay the HALF-YEAR rate if your application is postmarked between March 1, 1983 and August 31, 1983. Membership and publications expire December 31.

Half-Year Full-Year

- a non-IEEE member who wishes to join the Computer Society only \$16.00 \$32.00
- an IEEE member who wishes to join the Computer Society \$5.00 \$10.00 IEEE membership no. _____
- a non-IEEE member who wishes to join both IEEE and the Computer Society* \$50.50 \$86.00

PUBLICATION OPTIONS

If, in addition to your automatic subscription to COMPUTER Magazine, you would also like to receive: add:

- IEEE Computer Graphics & Applications (3061) \$6.00 \$12.00
- IEEE Micro (3071) \$6.00 \$12.00
- Transactions on Computers (1161) \$4.00 \$8.00
- Transactions on Computer-Aided Design of Integrated Circuits and Systems (1391) \$3.00 \$6.00
- Transactions on Software Engineering (1171) \$4.50 \$9.00
- Transactions on Pattern Analysis and Machine Intelligence (1351) \$4.00 \$8.00
- Journal of Solid State Circuits (4101) \$2.50 \$5.00
- Journal of Oceanic Engineering (4201) \$2.00 \$4.00
- Proceedings of the IEEE (5011) (available only to IEEE members) \$6.50 \$13.00

Total amount remitted with this application:

(Make checks or money orders payable to IEEE. Mail to the IEEE Computer Society, 10662 Los Vaqueros Circle, Los Alamitos, CA 90720)

*IEEE members in Region 7 (Canada) and 8 (Western Europe and the Mid-East) may deduct \$6 from full-year rates, \$3 from half-year rates. IEEE members in Regions 9 and 10 may deduct \$13 from full-year rates, \$6.50 from half-year rates. ACM members who join both the IEEE and the Computer Society may deduct \$5 from full-year rates, \$2.50 from half-year rates.

Hardcopy bulk air option for members in Regions 8-10: Western Europe, Latin America (including Mexico), and the Far East.

Add the following amounts for two-week delivery for COMPUTER, IEEE Computer Graphics & Applications, and IEEE Micro, and two- to six-week delivery for Transactions:

	Western Europe			All Other Areas
	Half-Year	Full-Year	Half-Year	Full-Year
COMPUTER	\$7.00	\$14.00	\$26.25	\$52.50
IEEE Computer Graphics & Applications	\$3.50	\$7.00	\$13.25	\$26.50
IEEE Micro	\$2.25	\$4.50	\$8.75	\$17.50
Transactions on Computers	\$4.75	\$9.50	\$17.50	\$35.00
Transactions on Computer-Aided Design of Integrated Circuits and Systems	\$1.50	\$3.00	\$5.75	\$11.50
Transactions on Software Engineering	\$3.25	\$6.50	\$11.75	\$23.50
Transactions on Pattern Analysis and Machine Intelligence	\$3.25	\$6.50	\$11.75	\$23.50
Journal of Oceanic Engineering	\$1.00	\$2.00	\$3.75	\$7.50
Journal of Solid State Circuits	\$4.25	\$8.50	\$16.00	\$32.00
Proceedings of the IEEE	\$7.25	\$14.50	\$27.25	\$54.50

"Western Europe" includes Albania, Austria, Belgium, Bulgaria, Cyprus, Czechoslovakia, Denmark, Finland, France, East Germany, West Germany, Gibraltar, Greece, Greenland, Holland, Hungary, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Malta, Monaco, Norway, Poland, Portugal (and Azores), Romania, Spain (and Canary Islands), Sweden, Switzerland, Turkey, United Kingdom, USSR, and Yugoslavia. "All other areas" includes all other countries outside the U.S., Canada, and Mexico.

Visa or Master Charge No.

Expiration date Check or money order enclosed

Use the numbers to identify your plant activity and your own work. If more than one activity is involved, use the code number for the most prevalent.
 Note: if you select "other" for work and plant code or "other personnel" for job function code, be sure to explain on the lines provided.

WORK AND PLANT (Enter codes)

- 1. Large computers
- 2. Minicomputers
- 3. Microcomputers
- 4. Computer peripheral equipment
- 5. Data processing systems (system integration)
- 6. Office and business machines
- 7. Test, measurement, and instrumentation equipment
- 8. Communications systems and equip.
- 9. Navigation and guidance systems and equipment
- 10. Consumer entertainment electronic equipment
- 11. Consumer electronic appliances
- 12. Other consumer electronics
- 13. Industrial controls, systems, and equip.
- 14. Components and subassemblies
- 15. Materials and hardware
- 16. Aircraft, missiles, space and ground support equipment
- 17. Oceanography and support equipment
- 18. Medical electronics
- 19. Industrial companies within OEM incorporating electronics equip. in their end product, not elsewhere classified
- 20. Independent research, test, and design laboratory and consultant (only if you are not connected with a mfg. co.)
- 21. Government agency and military
- 22. Industrial companies using and/or incorporating any electronic products in their manufacturing, research, or development activities
- 23. Communication (radio, TV, police)
- 24. Transportation services (airline, railroads, etc.)
- 25. Computer and data processing services: service bureaus, software services, timesharing, consulting
- 26. All other commercial users

JOB FUNCTIONS (Enter code)

- 1. General and corporate management
- 2. Design and development engineering (software, circuits, components, equipment, systems)
- 3. Engineering services evaluation (quality control, reliability standards, tests)
- 4. Member of Technical Staff (MTS)
- 5. Basic research
- 6. Manufacturing and production
- 7. Physicist, Scientist
- 8. Engineering support (draftsman, lab assistant, technician)
- 9. Purchasing and procurement
- 10. Marketing, including sales
- 11. Computer systems analysis
- 12. Engineering systems planning and design (utilities)
- 13. Operations including construction and maintenance (utilities)
- 14. Consulting
- 15. Other EE's
- 16. Other engineers (explain _____)
- 17. Dean, professor, instructor, etc.
- 18. Student
- 19. Retired
- 20. Other personnel (explain _____)

JOB CATEGORY (Enter code)

- 1. Management other than engineering
- 2. Engineering and scientific management
- 3. Engineering/Physicist/Scientist
- 4. Software management
- 5. Software scientist/engineer

Gossip...
(continued from page 20)
more than an ornament.

More than any other single factor – computerized financial spreadsheets are probably what truly popularized personal computers . . . at least in the business community. We have tried several of these spreadsheets and are particularly impressed with SuperCalc from Sorcim (especially if it is running on an 8086 or 8088 system with its massive memory space).

Sorcim has given considerable attention to assuring that SuperCalc is very congenial in its interactions with naive users. It minimizes the demand for users to be computer-

knowledgeable, and it minimizes the necessity for users to remember contorted sequences and obscure codes.

Though we recognize that application software is changing and improving with phenomenal speed, we certainly recommend that anyone needing a "what if" spreadsheet system take a careful look at SuperCalc.

AND PASCAL/M

While we are mentioning Sorcim software that we are using, we should mention their Pascal/M translator. It outputs p-code. Listings can easily be sent to the console, disk, or printer (unlike some Pascals that

"know what's best" for the user). It offers a number of significant extensions to Pascal as Wirth originally defined it, however – unlike some so-called "Pascal" translators on micros, it will translate programs that are written in standard Pascal.

It includes a good debugger – PASDDT – that, among other things, allows you to single-step through your program.

There is one other thing about Sorcim: It's run by a long-time computer pro of ample ability, named Richard Frank. In an industry where a few vendors are becoming increasingly concerned with the bottom line of their balance sheet and decreasingly

concerned with quality and service to their customers, we are delighted to encounter the likes of Mssr. Frank. He exhibits consistent loyalty to his friends, his customers and his industry, and it is well-reflected in the quality and ethics of his business dealings.

dbase II IS DE BASE TO SEE

We have recently been experimenting with Ashton-Tate's "dbase II" (yes, it's lower-case) database system. For a microcomputer, it is a massive, robust DBMS – certainly earning its "system" classification.

It now includes a very handy screen formatting program called "zip" that works along the same lines as the "what you see is what you get" CRT-oriented text editors.

Though it is certainly nontrivial to learn – as would be any system of its power and generality – we have, so far, found it to be significantly easier to use and faster in execution than several other database systems we have examined. Also – if you tried it some time ago – there have been significant enhancements over earlier releases, including better documentation, and access to multiple files.

FOR FORTH FANATICS

Shortly before press time, we received two Forth compilers for the 8086/8088 family – one from Laboratory Microsystems (8086 Forth), and one from Forth, Inc. (Forth, Level II). Both are well documented.

The 8086 Forth includes a "Towers of Hanoi" program that beautifully demonstrates some of the language's more impressive capabilities. This demo executes quickly, and consists of less than six screens of reasonably sparse code.

Forth – Level II is a comprehensive, stand-alone system for the IBM PC. It runs outside of the PC's normal operating system, among other things, allowing it to increase execution speed under some circumstances.

Getting from the Airport to San Francisco

Flying in for the Faire?

Once you step off your flight at the San Francisco Airport, watch for these shuttles to take you into the city.

The Airporter Bus will deliver you to its downtown San Francisco terminal in 30 minutes for \$4. After you arrive at the terminal, located at the corner of Ellis and Taylor, you'll need to take a cab to reach your hotel or the Civic Center.

The Airporter Bus leaves San Francisco International Airport every 15 minutes from the lower level TWA baggage claim area or carousel 5 of the United baggage claim area. For more information, call (415)-495-8404.

Limousine service to the Civic Center is offered by The Airport Connection. For \$42, five people can share a limo to the Civic Center. Call ahead for reservations, or be prepared to wait for up to an hour for a car. The Airport Connection's number is (415)-877-0901.

REQUEST for HOTEL RESERVATIONS

SAN FRANCISCO CIVIC CENTER

THE 8TH WEST COAST COMPUTERFAIRE

MARCH 18-20, 1983

For your convenience, Computer Faire has arranged for San Francisco Convention and Visitors Bureau to handle accommodations at the following hotels. These rates are only valid on reservations received by February 17, 1983. Rates are subject to 9.75% Hotel Tax, used in part to pay for San Francisco convention facilities.

Please complete this form and mail to:
West Coast Computer Faire Housing Bureau
San Francisco Convention and Visitors Bureau
Box 5612
San Francisco CA 94101

Advance reservations under this plan must be made on this form. Telephone reservations cannot be accepted.

HOTEL	Single	Double Twins	Suites
THE SAN FRANCISCAN (Headquarters) 1231 Market Street (1 block from Civic Auditorium)	\$60-\$72	\$70-\$82	\$140-\$160
HOLIDAY INN/CIVIC CENTER 50 Eighth Street (1½ blocks from Civic Auditorium)	\$68	\$78	
SHERATON PALACE 639 Market Street (8 blocks from Civic Auditorium)	\$100	\$110	
AMERICANA 121 Seventh Street (2½ blocks from Civic Center)	\$53-\$55	\$57-\$59	\$71-\$80
CARRIAGE INN 140 Seventh Street (2½ blocks from Civic Center)	\$53-\$55	\$57-\$59	
HOTEL BRITTON 112 Seventh Street (2½ blocks from Civic Center)	\$32	\$38	

PLEASE MAKE THE FOLLOWING HOTEL RESERVATIONS:

Hotel Choice: First _____ Second _____

Arrival Date & Time _____ Departure Date & Time _____

Type and Number of Rooms Required:

Single _____ Double or Twin _____ Suites _____

Rooms will be occupied by (Please designate those who will share rooms. List additional names on separate sheet):

Names (Please Print)	Street Address	City & State	Zip Code

Mail Confirmation To:

Name _____	Date _____
Title _____	
Company _____	Phone (____) _____
Street Address _____	
City _____	State _____ Zip _____

DO NOT SEND A DEPOSIT
WITH THIS FORM

No hotel reservations will be confirmed by the Computer Faire Housing Bureau until receipt of this form. sgg31

BEST of the COMPUTER FAIRES

Conference Proceedings of the West Coast Computer Faires

Listed below are the section titles for each volume.

- 1.** THE BEST OF THE COMPUTER FAIRES, VOLUME I
Conference Proceedings of the 1st West Coast Computer Faire
- Banquet Presentations
 - Tutorials for the Computer Novice
 - People & Computers
 - Human Aspects of System Design
 - Personal Computers for the Physically Disabled
 - Legal Aspects of Personal Computing
 - Heretical Proposals
 - Computer Art Systems
 - Music & Computers
 - Electronic Mail
 - Computer Networking for Everyone
 - Personal Computers for Education
 - Residential Energy & Computers
 - Computers & Systems for Very Small Business
 - Entrepreneurs
 - Speech Recognition & Speech Synthesis by Home Computers
 - Tutorials on Software Systems Design
 - Implementation of Software Systems & Modules
 - High Level Languages for Home Computers
 - Multi Tasking on Home Computers
 - Homebrew Hardware
 - Bus & Interface Standards
 - Microprogrammable Microprocessors for Hobbyists
 - Amateur Radio & Computers
 - Commercial Hardware
- 2.** THE BEST OF THE COMPUTER FAIRES, VOLUME II
Conference Proceedings of the 2nd West Coast Computer Faire
- Banquet Presentations
 - An Introduction for the Absolute Novice
 - Computers for the Physically Disabled
 - Computers for the Visually Handicapped
 - Exotic Computer Games
 - Computers in the Arts
 - Legal Aspects of Home Computers
 - Computer Esoterica
 - Communications Networks & Personal Computers
 - Public-Access Computer Centers
 - Computers in Education
 - Business Computing on Small Machines
 - For Computer Businesspeople & Craftspeople
 - Microcomputer Applications
 - Speech Input & Output
 - Computers in Amateur Radio
 - Hardware & Software Standards
 - Brewing Home Hardware
 - Designing with Microprocessors
 - Commercial Hardware
 - High Level Languages & Translators
 - Block Structured High Level Languages for Microcomputers
- 3.** THE BEST OF THE COMPUTER FAIRES, VOLUME III
Conference Proceedings of the 3rd West Coast Computer Faire
- Introduction for Novices
 - Visions of Near Future
 - Computer Music Systems
 - Intelligent Machines to Aid the Physically Impaired
 - Low-Cost Computers in Biomedical Environ & Health Delivery Systems
 - Computers for Education & Teaching
 - Computer Games & Puzzle Solving
 - Potential Legislation Affecting Computer Users & Owners
 - Low-Cost Aid to Government
 - Legal Aspects of Computers & Software
 - Inexpensive Computing for Business
 - The Business of Inexpensive Computing
 - Business Systems Software
 - Floating Point Standards & Mathematical Micros
 - Microcomputing Software
 - Peripherals: Plain & Fancy
 - Communicating Computers
 - The Unclassifieds: A Potpourri
 - Post Partum Paper: Arrival After the Press Began to Roll
- 4.** THE BEST OF THE COMPUTER FAIRES, VOLUME IV
Conference Proceedings of the 4th West Coast Computer Faire
- The Effect of Computers on Society
 - Designing Computers for Humans
 - Computer Communications for Human Communication: An Overview
 - Computer Communications for Human Communication: Digital Broadcasting
 - Computer Communications for Human Communication: Bidirectional
 - Microcomputers Energy Management & Environment
 - Low Cost Educational Computing
 - Personal Computing for Physicians & the Physically Impaired
 - Inexpensive Business Computing
 - Microcomputer Applications
 - Musical Computing
 - Systems Software: Pascal
 - Systems Software: Fort
 - Systems Software: Pilot
 - Potpourri: Plain & Fancy
 - Micro Peripherals
 - Amateur Radio & Microcomputing
- 5.** THE BEST OF THE COMPUTER FAIRES, VOLUME V
Conference Proceedings of the 5th West Coast Computer Faire
- Tutorials for the Novice
 - Artificial Intelligence & Micros
 - Computer Games & Computer Education
 - Low Cost Computing for Education
 - Teaching About Computers & Programming
 - Computer Assistance for the Physically Impaired
 - Medical Computing
 - Business & Low Cost Computing
 - Computer Music
 - Personal Communications & Microcomputers
 - Unusual Microcomputer Applications
 - Legal Aspects of Software Protection
 - Micro Software Engineering
 - Significant Software for Inexpensive Machines
 - Pascal & Pascal Machines
 - Micro Hardware & Interface
 - Potpourri
- 6.** THE BEST OF THE COMPUTER FAIRES, VOLUME VI
Conference Proceedings of the 6th West Coast Computer Faire
- For the Novice: Introduction to Computing
 - Microcomputing: Very Unusual Applications
 - Computer Graphics: Input
 - Computer Graphics: Processing
 - Computer Output in Two & Three Dimensions
 - Speech & Music Symbiosis by Computers
 - Mass Digital Telecommunications
 - Computers for Document Production
 - Biomedical Computing
 - Computers for the Physician's Office
 - Computing in Law & Law in Computing
 - Computer Assisted Instruction: Plain & Fancy
 - Computing & Education
 - Financial & Economic Applications
 - Computing for Business Applications
 - About the Computer Business
 - About Computer Personnel
 - About Computing: Some Observations
 - Engineering Applications of Microcomputers
 - Languages: LISP
 - Languages: UCSD Pascal Systems
 - Languages: FORTH
 - Languages: BASIC
 - Systems: Operating Systems
 - Systems: Database Management on Micros
 - On the Design of Hardware & Software
 - Homebrew Hardware
 - Quasi-Commercial & Very Commercial Hardware
 - A Report from Japan
 - The Last One
- 7.** THE BEST OF THE COMPUTER FAIRES, VOLUME VII
Conference Proceedings of the 7th West Coast Computer Faire
- For Novices
 - Applications
 - Educational Computing
 - Preschool Computing
 - Music
 - Graphics
 - Medicine
 - Business Computing
 - CP/M Data Management
 - Software
 - Software Protection
 - Computer Business
 - APPLES & 6502's
 - Standards
 - Keyboards
 - Hardware
 - Design Automation
 - International Developments
 - The Future
 - Philosophical Considerations
 - Employment
 - Writing & Documentation
 - Potpourri
- 8.** The Best of the Computer Faires, Volume VIII, will be available at the 8th West Coast Computer Faire, March 18-20 in San Francisco. Copies will cost \$15 each.
- Bulk Orders**
- Computer Faire proceedings may be ordered in bulk quantities at a discount. For complete details, write or phone Computer Faire, 345 Swett Road, Woodside CA 94062, (415)851-7077.

ORDER FORM

Conference proceedings: The Best of the Computer Faires

Quantity	Price	Total
Volume I	\$ 3.00	
Volume II	\$ 3.00	
Volume III	\$ 3.00	
Volume IV	\$ 3.00	
Volume V	\$ 15.00	
Volume VI	\$ 15.00	
Volume VII	\$ 15.00	
	Total	

PLEASE GIVE ME YOUR BEST DEAL: all 7 volumes for \$55.00
(all prices include tax and UPS shipping charges)

Enclosed is my check for \$ _____ in full payment of my order.

Please charge to my Mastercharge Visa Card Number _____ Exp. date _____

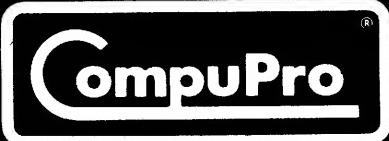
Signature _____ MC Bank Code _____

Name _____ (please type or print)

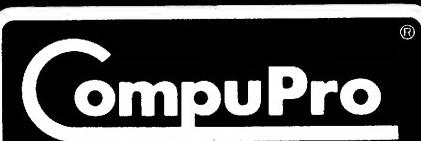
Address _____ City _____
(UPS cannot deliver to USPO box address. Add \$1.00 each for Parcel Post.)

State _____ Zip _____ Phone Number _____

Computer Faire 345 Swett Road Woodside CA 94062 (415)851-7077

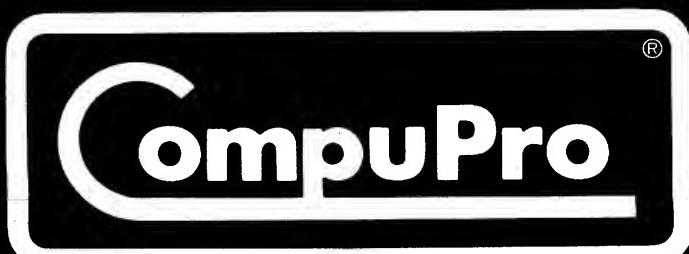
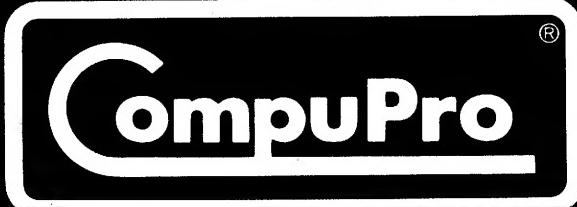


CP/M[®]



CP/M-86[®]

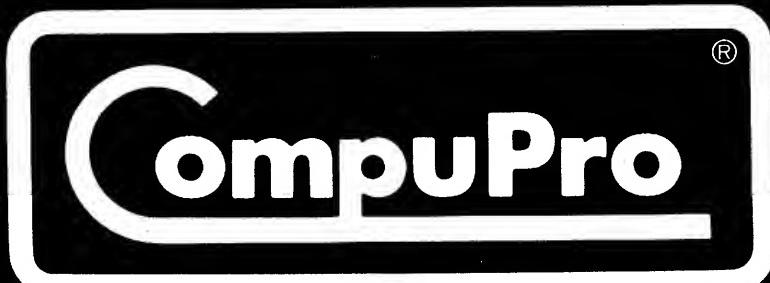
CP/M 68K^{T.M.}



MP/M 86^{T.M.}

MP/M-816^{T.M.}

The system used by many
leading software developers
is now available to business, scientific,
and industrial computer users.



CompuPro division, Godbout Electronics, Box 2355, Oakland Airport, CA 94614